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THE FORCES AFFECTING THE SUCCESS OF AN MBO PROGRAM

*Kent E. Curran, Jerry A. Wallin, and Robert J. Lichtman**

Management by objectives (MBO) has received considerable attention in both management literature and practice since it was first described by Drucker[1] some 25 years ago. At that early point in its history few companies in the world and only a rare nonbusiness enterprise had actually initiated and were operating under programs of managing by objectives. Today, in the United States and countries around the world, many business corporations and other kinds of organizations utilize, or at least think they are using, programs of management by objectives.

One of the leading proponents of the MBO approach is George Odiorne. He views management by objectives as

> a process whereby the superior and subordinate managers of an organization jointly identify its common goals, define each individual's major areas of responsibility in terms of the results expected of him, and use these measures as guides for operating the unit and assessing the contribution of each of its members.[2]

Although organizational applications of MBO undoubtedly vary, the process basically consists of four distinct steps: (1) identification of managers' key areas of job responsibility, (2) establishment of specific objectives in key areas of responsibility, (3) periodic review of progress toward objectives, and (4) end-of-period evaluation of managers' performance on objectives.[3]

The acceptance and popularity of the MBO approach seems to have resulted from the expected benefits or values that will accrue to the implementing organization. Clearly the major discussion of benefits of the approach centers around the possibility of more objective performance evaluation. However, a number of authors have identified other values that may accrue from the use of an MBO program, including: (1) the effective development of a structured pattern of planning throughout the organization, (2) the clarification of organizational roles and structure, (3) the development of better working relationships between the manager and subordinates, and (4) the identification and reasons for control.[4]

Owens, Koontz, and Schnake have also identified what they variously call the limitations, pitfalls, or problems associated with the MBO process. The more negative consequences include: (1) the degeneration of MBO programs into a lifeless slogan or ritual of mechanical techniques, (2) the difficulty of establishing goals, which results in the vague and poor definition of objectives; (3) the tendency for goals to be short term or lack relative priorities, and (4) the excessive and exclusive emphasis on quantifiable results, ignoring critical qualitative elements.

For the most part, management by objectives has been implemented on the basis of its apparent theoretical practicality and advantages. There has been only limited research examining its values and problems. One of the only longitudinal research studies examining these issues was conducted by Raia at the Purex Corporation.[5] Raia examined the actual operation of a form of MBO program referred to as "Goal Setting and Self Control." He found that after the goal-setting program was initiated, participants at Purex were more concerned about and aware of the corporation's goals and future activities. The initial inquiry illustrated that the goal-setting procedure improved communications and understanding among those involved.

The follow-up study found that many of the participants perceived the program as being a weak incentive for improving the performance level of participants. The participating managers had changed their evaluation of the program after it had been in existence for a period of time. The managers' reasons for this change in attitude were divided into five categories: (1) managers reported that the program was used as a whip, (2) the program failed to reach the lower managerial levels, (3) the program increased the amount of paperwork, (4) there was an overemphasis placed on production, and (5) the program failed to provide adequate incentives to improve performance.[6]

A second study looking at the advantages and disadvantages of an MBO program was reported by Tosi and Carroll.[7] These authors conducted a survey of 48 managers in a large manufacturing firm concerning their reactions

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[1] C. F. Drucker, *The Practice of Management* (New York: Harper & Row, 1954).

[2] G. S. Odiorne, *Management by Objectives* (New York: Pitman, 1965).

[3] R. W. Hollman, "Supportive Organizational Climate and Managerial Assessment of MBO Effectiveness," *Academy of Management Journal* 19 (1976): 560-76.

[4] J. Owens, "The Values and Pitfalls of MBO," *Michigan Business Review* 26 (1974): 11-14; H. Koontz, "Making MBO Effective," *California Management Review* 20 (1977): 5-13; and M. E. Schnake, "Management by Objectives: Review and Evaluation," *Managerial Planning* 27 (1979): 19-24.

[5] A. P. Raia, "Goal-Setting and Self Control," *Journal of Management Studies* 11, No. 1 (1965): 34-53, and "A Second Look at Management Goals and Controls," *California Management Review* 8 (1966): 49-58.

[6] Raia, "Goal-Setting and Self Control."

[7] H. L. Tosi and S. J. Carroll, "Managerial Reaction to Management by Objectives," *Academy of Management Journal* 11 (1968): 415-26.

toward MBO. They found that a majority of the managers believed that the most significant advantage of the program was that one was more likely "to know what was expected of him by his boss." A major problem cited by the managers was that there were excessive formal requirements imposed because of the program. That is, the need to process, complete, and update forms was a source of irritation.

In summary, there appears to be general consensus that MBO provides value to the adopting organization. However, the consensus appears to be derived more from theoretical extrapolation than from research verification. Few studies have attempted to determine either the values or the problems inherent in the MBO process. Also, studies that have examined MBO problems have focused on problems related to extensive use of the program and not on problems related to successful implementation. The purpose of this article is to examine more fully, through a longitudinal analysis, the anticipated and actual values and implementation problems of an MBO program.

The Present Study

The management by objectives program referred to in this article was implemented in a manufacturing firm involved with the production of large mobile equipment. The firm is a well-established organization employing approximately 600 people. The company has four plants located throughout the South, but this study deals exclusively with the largest plant of the group, which management considered to be its main branch or "arm."

The authors were involved as external agents in a detailed organizational diagnosis of the corporation and recommended to the company president an MBO program. This recommendation was accepted, and a 40-hour MBO workshop was developed for the managerial personnel involved. The MBO program consisted of four distinct phases:

1. Foundation Phase. During this phase the organization's overall strategic goals and priorities were identified. Participating managers then identified the role that their units would play in the organization by developing results areas and performance indicators.
2. Objectives Phase. The second phase dealt with helping participants write objectives. The managers were asked to compare their results areas to the organization's goals and draft rough objective statements. These objectives were reviewed in terms of results orientation, specificity, measurableness, timing, traceability, challenge, and comprehensiveness. Managers then discussed passing the check step with peer managers to ensure coordination of effort within units and with other departments.
3. Action Planning Phase. At this point, the managers were asked to develop a detailed plan listing the activities through which they would meet objectives. The plan specified completion dates and identified responsible personnel.
4. Implementing, Monitoring, and Adjusting Phase. In this final phase all participants had one-to-one meetings with their immediate superiors to review the action plans. To maintain the integrity of the program, periodic progress reviews were instituted.

The program was presented to six different management groups within the organization:

Group 1—the 6 vice-presidents of the organization
Group 2—the 10 department heads in the organization
Group 3—the 10 second-level managers in the accounting, data processing, finance, and personnel departments
Group 4—the 9 second-level managers from the project engineering and production control department
Group 5—the 12 worldwide area and district sales and service managers in the organization
Group 6—the 7 first-line foremen in the organization

Thus, in total, the program was presented to all 45 managerial personnel in the organization.

In order to elicit the expectations of the MBO participants, each group upon completion of the 40-hour program was asked to identify what it considered to be the driving forces or potential values of the program and also the restraining forces or implementation problems of the program. The group responses to each of the questions were recorded. The groups were then asked to prioritize both the driving forces and restraining forces lists. These two lists, therefore, represent what might be identified as the theoretical expectations of the MBO participants. The term "theoretical" is used because at this point the managers involved in the program had no firsthand knowledge of actual values and restrictions.

The second stage of this research was undertaken approximately 18 months after the initial implementation of the MBO program. At this point the researchers again met with the six groups. The original questions concerning the driving forces and restraining forces of the MBO program were repeated. However, this time the participants were asked to relate the actual values and problems they had experienced. The prioritized lists developed in this second stage of the study provided the researchers with the opportunity to evaluate the similarities and/or differences between MBO expectations and MBO realities.

Results

Table 1 presents the rankings of the anticipated driving forces (values) identified by each of the six groups after the MBO training. Three factors consistently stand out as being perceived by the managers as positive outcomes of implementing an MBO program in their organization. They are "job clarity and definition," "improved communications," and "better planning." Of the remaining 19 factors that were generated by the six groups, none consistently appeared in all six group lists.

Table 1

PREDICTED DRIVING FORCES (VALUES) AND RANKINGS

Group 1
1. Job clarity and definition
3. Planning
4. Motivation
5. Dynamics and progress in company
6. Top management commitment
7. MBO teacher

Group 2
1. Communication
2. Job clarification
3. Planning
4. Department coordinator
5. Continuity
6. Problem identification
7. Performance indicators
8. Profit

Group 3
1. Job definition
2. Planning
3. Communication
4. Performance indicators
5. Performance review
6. Action planning
7. Department coordinator
8. Satisfaction

Group 4
1. Job clarity
2. Planning
3. Communication
4. Profit
5. Personnel efficiency
6. Achievement oriented
7. Simple
8. Future oriented

Group 5
1. Communication
2. Job clarity
3. Planning
4. Performance indicator
5. Team work
6. Action plan
7. Department coordinator
8. Performance review

Group 6
1. Job clarity and definition
2. Communication
3. Direction
4. Planning
5. Motivation
6. Organization
7. Increase productivity
8. Profit

Table 2

PREDICTED RESTRAINING FORCES (IMPEDIMENTS) AND RANKINGS

Group 1
1. Lack of commitment by top management
2. Resistance to change
3. Higher priorities
4. Excessive paperwork
5. Time and cost
6. Comprehension of MBO

Group 2
1. Lack of top management support
2. Continued application
3. Negative attitudes
4. Time and schedule
5. Other priorities
6. Comprehension
7. Paperwork
8. Historical data

Group 3
1. Lack of top management support
2. Resistance to change
3. Lack of implementation support
4. Resources
5. No feedback
6. Lack of trust
7. Lack of department coordination
8. Training time

Group 4
1. Lack of commitment
2. Lack of follow through
3. Negative attitudes
4. Lack of department communication
5. More work
6. No long-range plan
7. Fear of objectives

Group 5
1. Lack of top management support
2. Negative attitudes
3. Lack of information
4. Lack of resources
5. Need continued training
6. Lack of incentives
7. Delegation of authority
8. Crisis management

Group 6
1. Negative attitudes
2. Lack of top management support
3. Improper objectives
4. Communication breakdown
5. Improper follow-up
6. Inadequate number of reviews
7. Rewards not related to performance
8. Acts of God

Table 3

ACTUAL DRIVING FORCES AND RANKINGS

Group 1
1. Planning and direction
2. Job priorities
3. Feedback
4. Understanding of other department problems
5. Communication

Group 2
1. Organization
2. Motivation
3. Planning
4. Realistic goal setting
5. Communication
6. Job priorities
7. Feedback

Group 3
1. Company attitude
2. Communication
3. Planning and organizing
4. Job priorities
5. Realistic goals
6. Productivity
7. Information and feedback

Group 4
1. Direction and planning
2. Organization and coordination
3. Motivation
4. Information and feedback
5. Company direction
6. Job priorities
7. Personal development
8. Decision making

Group 5
1. Cooperation between departments
2. Communication
3. Feedback
4. Planning and direction
5. Job clarity
6. Job priorities

Group 6
1. Motivation
2. Communication
3. Planning
4. Coordination
5. Job clarity and priority
6. Decision making
7. Understanding superiors

Table 4

ACTUAL RESTRAINING FORCES AND RANKINGS

Group 1
1. Lack of timely decisions
2. Lack of top management commitment
3. Lack of feedback review sessions
4. Unclear chain of command
5. Management by crisis
6. MBO not cover special projects

Group 2
1. Lack of top management commitment
2. Lack of review meetings
3. Lack of resources
4. Priority changes
5. Return to past habit
6. Lack of department head meetings

Group 3
1. Lack of management support
2. Lack of resources
3. Priority changes
4. Lack of delegation
5. Time requirements
6. Unclear chain of command
7. Lack of definition of end results

Group 4
1. Lack of management commitment
2. Changes in priorities
3. Management by crisis
4. Lack of review sessions
5. Lack of resources
6. Lack of management decision making

Group 5
1. Lack of management follow-up
2. Resistance to change
3. Revert to crisis management
4. Lack of resources
5. Lack of defined authority and responsibility
6. Economic conditions
7. Lack of review sessions

Group 6
1. Lack of management commitment
2. Economic conditions
3. Unclear chain of command
4. Lack of review meetings
5. Lack of resources
6. Crisis management

Table 2 presents the rankings of the anticipated restraining forces (impediments) identified by each of the MBO groups. There are no restraining factors that were consistently identified across all six groups. This finding was not unexpected, since the managers developed the driving force factors from the theoretical background that was presented to them during the training sessions. There was no similar background on which the managers could draw from in developing the restraining factors. Among the various restraining factors identified, however, "lack of top management commitment," "negative attitudes of the people involved," and "poor communications" were seen as the factors with the greatest potential for impeding the successful implementation of the MBO program.

Table 3 indicates the actual values of the MBO program for the six groups after the program had been in place for 18 months. Two factors were mentioned by all six groups: "improved planning" and an increased ability to identify "job priorities." The six groups were also consistent in

identifying the importance of the MBO program in improving communications, increasing diffusion of information, and increasing the amount of feedback received. Other values identified by at least half of the groups included better organization and direction, increased individual motivation, and a better understanding and more positive attitude toward the company. Surprisingly, only one group identified increased productivity as an actual value of the MBO program.

Table 4 presents the forces that the MBO participants actually felt restrained or hindered the implementation and success of the MBO program. There seems to be a strong consensus among the six groups. Four restraining forces were identified by five or more of the groups: "lack of top management commitment," a return to "management by crisis" rather than management by objectives, a "lack of resources" (human and financial) to accomplish established objectives, and a "lack of review sessions" discussing the MBO program.

Discussion

Reviews of the MBO literature indicate that its popularity is based more on its common-sense appeal, its rather simplistic format, and its articulate supporters than on scientific field evaluations of MBO-type interventions. Those field studies that have examined MBO problems have focused on issues related to the extensive use of the program and not on problems related to successful implementation. The present study was an initial attempt at filling this research void.

This study reveals a consistency between the anticipated and actual values derived from participation in an MBO program. There also seems to be support for the glowing testimonials MBO has received. Improved planning, communications, and job clarity were three anticipated results of the MBO program that were also identified as actual consequences. Some unanticipated but valuable benefits of the program were increased amounts of information and feedback, better organization and direction, and increased motivation and loyalty. All of the above values are included in the testimonials of authors such as Owens, Koontz, and Schnake. It therefore appears that this study coupled with the work of Raia and Tosi and Carroll can add some empirical evidence to support the theoretical practicality and advantages of MBO

As previously indicated, there have been few attempts to identify restraining forces to MBO success that might be encountered. Therefore, a lack of consistency among the participating groups in choosing potential restraining factors was not unexpected. It was surprising, however, to find a great deal of consistency among the groups when actual restraining forces were listed. Lack of top management commitment was the only restraining factor included in both the anticipated and actual restraining forces lists. This is perhaps the most critical restraining factor to success of the MBO program. Many authors indicate that top management support, commitment, and involvement are mandatory. Without such involvement, an MBO program will probably decline in usage over time. The importance of top management involvement in the implementation of MBO is pointed out by Odiorne when he notes:

> One of the major reasons for the failure of MBO in many organizations is that those in charge fail to recognize the potential character of the implementation process. MBO is indeed logical and systematic, but it must also deal with a number of factors, including power and authority, the organization form, and the values and expectations of people.[8]

There were three other restraining forces identified by five of the six MBO groups. These forces included a return to management by crisis rather than management by objectives, a lack of resources (human and financial) to accomplish established objectives, and a lack of review sessions discussing the progress of the MBO program. The first two indicate the potential impact that the economy can have on the implementation of an MBO program. Economic uncertainty during the implementation period results in a lack of resources to carry out established objectives. This pressure also results in priority changes and crisis management decisions undertaken without utilizing the MBO system. The final restraining factor, lack of review sessions, indicates disregard for one of the basic steps of the MBO process and may result from lack of management commitment to the program.

This research was an initial attempt at utilizing a longitudinal design to identify both the values of and restraints to implementing an MBO program. The usual caveats regarding the results of an intervention at a single organization must be observed. However, only by empirically investigating ongoing MBO programs can a complete body of knowledge concerning the benefits and pitfalls of the approach be developed. More such studies need to be conducted and reported to ascertain the full potential and weaknesses of management by objectives programs.

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[8]G. S. Odiorne, "The Politics of Implementing MBO," *Business Horizons*, 1974, pp. 13-21.

HOUSING, INFLATION, AND THE CONSUMER PRICE INDEX

*Harry A. Green**

During the past decade, the Consumer Price Index (CPI) has become a household word. Citizens who know little about index numbers or the dynamics of price movements avidly follow the monthly announcements by the Bureau of Labor Statistics (BLS) concerning the CPI. There is little mystery about this popularity. The CPI has been used as an escalator for social security benefits, civil and military retirement benefits, union wages, legislative and judicial salaries, and administrative costs for insurance companies. It is widely used as the official measurement of inflation for numerous purposes. Currently, it is estimated that for each 1 percent annual increase in the CPI, the federal government must increase social security payments by around $1.3 billion.[1]

In recent months, concern about the technical validity of the CPI has begun to resurface. The word "resurface" is used advisedly, because this concern is not new per se. Only its intensity is new. A major study of the CPI and other price statistics was conducted by the Joint Economic Committee of the U.S. Congress in 1961.[2] During the period of the most recent revision of the CPI (1970-78), considerable attention was directed to all the major assumptions of the methodology and the limitations of the CPI. In short, concern about vital elements of the CPI has been expressed on numerous occasions in the past and is well known to BLS.[3]

An area of significant concern is the housing component of the CPI, and more particularly the homeownership subcomponent. In 1979, Alfred Kahn, Chairman of the Council on Wage and Price Stability, went public with the argument that this element of the CPI urgently required revision. Kahn argued that the homeownership index exhibited an "upward bias" that overstated housing inflation. In turn, the influence of the homeownership index on the CPI All Items City Average resulted in an overall misstatement of the level of inflation.

This article addresses this contretemps, essentially in three parts. First, the relationship between housing and inflation is analyzed in terms of the relationship between the major economic indicators. Second, the homeownership component of the CPI is reviewed and subjected to statistical analysis. And third, alternative measures for homeownership are considered.

Housing and Inflation

A measurement of the relationship between inflation and the price of housing can be illustrated by comparing relevant components within the CPI and the GNP price deflator series. A major element of the housing component of the CPI is home purchase. During the period 1967-80, the rise in the home purchase index was 154.4 percent, somewhat higher than the 146.8 percent rise in the CPI All Items City Average.

Similarly, the GNP price deflator for nonfarm residential structures rose nearly 190 percent between 1967 and 1980, while the overall GNP price deflator rose only 124.5 percent. This indicates that the relationship of the housing price index to the general price index follows the same pattern in both series, although the GNP housing index rose at a rate much greater than the CPI home purchase index. Moreover, it is clear that the rate of inflation has intensified. With the exception of the GNP price deflator, inflation accelerated during the period 1975-80:

	1967-74	1975-80
GNP Price Deflator	45.4%	41.3%
GNP Price Deflator for Nonfarm Residential Structures	57.5%*	68.8%
CPI	38.9%	53.1%
CPI Home Purchase	42.8%	58.6%

By comparison, it should be noted that growth in the median price for new homes, as reported by the Department of Commerce, was nearly equivalent to the growth in the GNP deflator for nonfarm residential structures. During the period 1967-80, the median price for new one-family houses increased by 186.0 percent; it increased by 58.3 percent between 1967 and 1974 and by 65.1 percent between 1975 and 1980. Thus, irrespective of the measure chosen, housing prices rose more rapidly than the general price level.

In terms of what this means to the economy and the affordability of housing, an analysis of income characteristics is useful. During the period 1970-79, median family income rose nearly 90 percent, increasing slightly faster for 1975-79 (38.0 percent) than for 1970-74 (35.2 percent). This suggests, of course, that family income

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[1]For a review of a number of issues pertaining to the CPI, see Harry A. Green, "The Consumer Price Index: A Misunderstood Statistic," *Mid-South Business Journal*, January 1981, pp. 3-8; and Evan Clague, "Computing the Consumer Price Index," *Challenge*, May 1962.

[2]U.S. Congress, Joint Economic Committee, *Hearings, Part I*, "Government Price Statistics" (Washington, D.C.: 87th Congress, 1st Session, 1961).

[3]See Janet Norwood, *CPI Issues* (Washington, D.C.: Bureau of Labor Statistics, February 1980). Also see W. John Laying, "The Revision of the Consumer Price Index," *Statistical Reporter*, February 1978.

growth was influenced by the acceleration of the inflation rate. For the same period disposable income per capita increased by 119.3 percent. During 1970-74, disposable income and disposable income per capita increased by 43.6 percent and 38.8 percent, respectively. For 1975-79, comparable growth rates were 49.8 percent and 45.0 percent.

This indicates that median family income, disposable income, and disposable income per capita advanced at a greater rate than the CPI and GNP price deflator—the general price level indexes. However, none of these three income indicators grew as rapidly as the housing price indexes.[4]

If housing prices are rising faster than the CPI All Items City Average and the GNP price deflator, it is a reasonable conclusion that housing is generally less accessible—and less affordable—than other consumer goods and services. Alternatively, it must be concluded that the average consumer family must either expand family income, as in the case of the two-income family, or give up more nonhousing consumption to be able to maintain an accessibility and affordability for new housing.

It may be important to distinguish between the "price" of housing and the "cost" of housing.[5] The indexes cited above are all price measures. There are two sets of cost indexes that should be analyzed: the Department of Commerce's Construction Cost Index and the E. H. Boeckh Cost Indexes.[6]

This analysis illustrates that the impact of inflation has been differential depending upon the type of construction. The composite construction cost index shows the overall cost rise for all types of construction to be 150.2 percent for the period 1970-80. This is considerably higher than any of the Boeckh indexes, which indicate that costs have risen more rapidly for commercial/industrial construction (129.8 percent) than for either apartments and light commercial (117.3 percent) or residential (121.4 percent).

Similar to the analysis of price indexes, analysis of these indexes shows that costs of construction have accelerated, but not as rapidly as prices. For the period 1975-80, costs rose more sharply than for the period 1970-74. The composite construction cost index shows that costs increased 60.2 percent during 1975-80, considerably above the 43.2 percent level for the 1970-74 period. The Boeckh cost index for residential construction rose only 47.7 percent compared with the CPI home purchase index of 58.6 percent and the median price for new single-family homes of 65.1 percent.

Housing and the Consumer Price Index

The Consumer Price Index is a very complex weighted aggregative index number. The housing component comprises three parts—shelter, fuels and other utilities, and household furnishings and operations—and has an overall weight of 44.999. The shelter component is similarly composed of three elements—residential rent, other rental costs, and homeownership.

The homeownership component is complex and composed of a number of important elements. An analysis of relative importance indicates that the homeownership component, with a relative weight of 24.904 (effective December 1980), is the most important single element in the entire CPI. This component also comprises three elements: (1) home purchase, (2) financing, taxes, and insurance, and (3) maintenance and repairs. The home purchase element with a weight of 10.396 represents the CPI price index for new houses. Financing, taxes, and insurance has a similar relative importance with a weight of 10.902.

An analysis of the shelter component, compared to the All Items CPI for the period 1960-80, is presented in Table 1. During the 11-year period, only once did the CPI exceed the rate of increase in the shelter component (in 1973). For three years—1971, 1974, and 1976—the rate of increase was nearly equal. For the period 1967-80, overall CPI inflation was 146.8 percent compared with the shelter inflation of 163.3 percent. Moreover, with the exception of residential rent, which increased at the comparatively low rate of 91.6 percent, each element of the shelter component increased faster than the general CPI. Significantly, financing, taxes, and insurance grew at a rate of 296.4 percent.

The acceleration of inflation intensified during the latter half of the period. In each category, the rate of inflation was greater during 1975-80 than it was during 1969-74. During the earlier period, general inflation and shelter inflation actually grew at approximately the same rate (around 35 percent), with the home purchase index even lower (30.3 percent). During the latter period, however, the shelter index grew more rapidly than the CPI. The homeownership index exceeded the CPI by nearly 20 percentage points, but financing, taxes, and insurance exceeded it by 43 percentage points. For such a short period of time, these numbers represent very significant increases and demonstrate why there has been such a clamor for revision of the homeownership component. Once again residential rent recorded the smallest increase (1975-80) at around 40 percent—some 13 percentage points below the CPI.

Within the homeownership component, one of the fastest rising price categories is "Contracted Mortgage Interest Cost" (CMIC). This represents the increases in prices in this category as it pertains to those persons and families who actually purchased a house during the time of the BLS "Consumer Expenditure Survey" conducted in 1972-73. For the period December 1979 to December 1980, the CMIC index increased 27.6 percent compared to 15.0 percent for mortgage interest rates, 11.4 percent for home purchase, 16.5 percent for homeownership, 13.7 percent for the overall housing component, and 9.1 percent for residential rent. During this period the

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[4]William R. Sayre, "Cyclical Downturn in Housing," *Economic Perspectives* (Chicago: Federal Reserve Bank, May-June 1980), pp. 3-12.

[5]Randall J. Pozdena, "Inflation Expectations and the Housing Market," *Economic Review* (San Francisco: Federal Reserve Bank, Fall 1980), pp. 29-47.

[6]See *Statistical Abstract of the United States* and *Construction Review*, a periodical published by the U.S. Department of Commerce.

Table 1

CPI ALL ITEMS CITY AVERAGE AND THE SHELTER COMPONENT:
A COMPARISON OF RATES OF GROWTH, 1969-80
(In Percentages)

	CPI All Items City Average	Shelter Component of CPI					
				Homeownership			
		Total	Residential Rent	Total	Home Purchase	F.T.I.[1]	Maintenance
1969	—	—	—	—	—	—	—
1970	5.9	7.1	4.2	10.8	8.0	15.0	7.8
1971	4.3	4.4	4.6	4.0	5.5	0.8	7.8
1972	3.3	3.8	3.5	4.8	4.2	5.1	5.2
1973	6.2	4.4	4.3	4.7	2.1	6.5	7.3
1974	11.0	11.3	5.1	11.2	7.5	12.8	13.6
1975	9.1	10.6	5.1	11.3	12.3	11.5	9.3
1976	5.8	6.1	5.4	5.5	5.1	5.4	6.4
1977	6.5	5.8	6.1	6.9	6.6	6.8	7.6
1978	7.7	8.7	6.8	10.9	9.6	13.5	8.5
1979	11.3	12.2	7.3	15.5	13.4	19.8	10.0
1980	13.5	15.7	8.9	19.7	14.0	28.3	10.8
Overall Increases:							
1967-80	146.8	165.3	91.6	214.1	154.3	296.4	184.0
1970-80	112.2	122.8	64.0	144.4	114.9	178.6	129.0
1969-74	34.5	34.9	23.6	40.7	30.3	46.4	49.2
1975-80	53.1	60.1	39.5	72.9	58.6	96.3	51.4

[1]Financing, Taxes, and Insurance.

Source: Bureau of Labor Statistics, *Handbook of Labor Statistics*, 1980, and *CPI Detailed Reports*, various months, 1979 and 1980.

property tax index rose only 4.6 percent. From August 1979 to December 1980, CMIC increased from 387.2 to 555.5, nearly 44 percent during the 18-month period.

A limitation of the CPI home purchase and homeownership treatment is that it relies solely on data furnished by the Federal Housing Administration.[7] Thus, the data on new house sales are limited to those that are subject to FHA financing. Conventionally financed houses are excluded from the index. Moreover, it should be noted that the nature of the real estate market—reflecting both consumption of housing and investment in housing—creates a condition incompatible with the fixed market basket principle of the CPI. The dynamics of the market prevent the BLS from using a fixed sample of houses because housing turnover is relatively infrequent. Consequently, BLS must select a new sample of recently sold houses each month.

This observation is not true, however, for contracted mortgage interest cost, which is constructed using data pertaining to FHA, VA, and conventional loans. Data for conventional loans are supplied by the Federal Home Loan Bank Board. Thus, this element is fairly comprehensive, whereas the home purchase element is restrictive. Another interesting aspect of the CMIC element is the method of weighting it. The general weighting principle used in the CPI is that each component should be assigned a weight equivalent to actual consumer expenditures in the survey year. Mortgage interest cost is weighted not by this method but rather by the amount of interest that mortgagors of the survey period are committed to pay during the first half of the mortgage loan period. The rationale for this is that since a large number of homebuyers will sell their homes and prepay their mortgages before full term, it would be incorrect to include all mortgage interest costs.[8]

The relationship between general interest rate movements and the CPI is, quite obviously, a matter of great concern. During the period 1952-65, both inflation and interest rates were relatively stable, exhibiting only minor volatility.[9] The prime rate or commercial paper rate was strongly correlated to the GNP price deflator index. This indicated that interest rates tended to rise with increases in the general price index. This same relationship—interest rate to price index—was not as strong during 1966-79, although the relationship was statistically significant.

For the latter period, however, the correlation between *interest rates* and *inflation rates* was quite strong and significant at the .01 level. This indicates that during this period of economic volatility, inflation rates tended to reflect interest rates and interest rates tended to reflect inflation rates.

Thus, the Fisher effect—that nominal interest rates include inflation premium—was quite evident. Fluctuations

[7]Walter Lane, "The Costs of Homeownership: A Key Component in the Consumer Price Index," reprinted from *Seller/Services* magazine (Federal National Mortgage Association, not dated).

[8]Ibid.

[9]William N. Cox, "Interest Rates and Inflation: What Drives What?" *Economic Review* (Atlanta: Federal Reserve Bank, May-June 1980), pp. 20-25.

in inflation expectations occur whenever there are major price shocks, or expectations of price shocks, and these expectations are fairly quickly incorporated into interest rates. Recent analysis points up the tendency for interest rates to increase almost on a point-to-point basis with inflation.[10] As noted by the Congressional Budget Office, interest rate volatility has "an exaggerated impact on the CPI because interest rate level is a function of inflation, while, in turn, inflation is driven by interest rates."[11] In particular, this is manifested in the contracted mortgage interest costs element of the homeownership component.

Homeownership and Inflation

Theoretically, if homeownership "causes" an upward bias during inflation, it should also "cause" a downward bias during deflation. That is to say, when the forces that drive the homeownership component moderate and decline in intensity, that change should be reflected in the price index for homeownership. In turn, the moderation of the homeownership component should be reflected in the CPI average.

Empirical analysis substantiates this hypothesis. The CPI All Items City Average was regressed on CPI homeownership, using simple regression analysis, for the period 1969-80. This produced the following equation:

$$y = -32.876 + 1.36B$$
$$(29.88)$$
$$r^2 = .988$$

The linear relationship between the two variables is nearly perfect. The correlation coefficient is .994. With the t value equal to 29.88, the relationship is statistically significant at the .01 level. This tells us that the rise in CPI All Items moves in nearly perfect harmony with a rise in CPI homeownership. This suggests—but does not prove—that the CPI is driven by CPI homeownership. The degree to which this is true can be tested by correlating the rates of increase in the two index numbers rather than the index numbers themselves. The analysis produces a correlation coefficient of .876, a coefficient of determination of .767, a t value of 5.439, and a relationship that is statistically significant at the .01 level. This indicates that the relationship between the rates of increase in the CPI homeownership and CPI is quite strong but not as strong as the relationship between the index numbers. However, it is valid to conclude that the CPI All Items average is significantly influenced by CPI homeownership.

However, for this period, 1969-80, the movement in the CPI homeownership has been so rapid that it is not a reliable predictor variable for the CPI. Although the CPI may be driven by the housing influence, that influence is moderated by all the other price movements in the series. Thus, if one were to predict CPI on the basis of the homeownership index alone, the estimate for CPI would have an upward bias.

During this period, the direction of the two price indexes has been up. Very high rates of inflation were also measured during 1979 and 1980. The housing, homeownership, and home purchase indexes advanced to a higher level each month during the 24-month period. In February 1981, however, the home purchase price index fell by 1.2 percent, and financing, taxes, and insurance moderated considerably to + 0.4 percent. A change of this significance should have led to a decline in the CPI All Items average, given the considerable influence that housing has on an overall average. On the contrary, the February index increased by 1.0 percent while the January index increased only 0.7 percent. On an annualized basis, this is 12.7 percent compared to 8.7 percent, a significant difference given the decline in important elements of the housing component.

This is an example of the complexity of the CPI series and how large "price shocks" reverberate throughout the statistical system: a large increase in energy more than offset the decline in the various housing elements. Overall, housing rose by 0.6 percent while the CPI index rose 1.0 percent. Simultaneously, gasoline rose by 6.6 percent and fuels rose by 3.2 percent. According to the BLS, these increases in energy prices accounted for nearly 60 percent of the February increase. These higher energy prices were reflected mainly in transportation and housing components. Higher gasoline prices were the principal "cause" of the 2.4 percent rise in the transportation component and the rise in household fuels offset the decline in house prices while contributing about 60 percent of the increase in the housing index.

Alternative Measures for Homeownership

Presently, the BLS relies upon an "asset" approach for the construction of the homeownership component of the CPI.[12] This approach was developed in the 1950s when house prices, the underlying rate of inflation, and inflation expectations were low. Moreover, the relative weight assigned to this component was also lower and the combined impact of the lower weight and lower inflation "controlled" the influence of housing prices on the overall CPI.

Essentially, the asset approach is erroneous under any set of economic conditions. It implies that house purchasers consume the total value of the house—the purchase price plus one-half of the contract financing costs—in the year of purchase. In this case, it refers to the survey year 1972-73 and covers only about 6 percent of the total number of families or persons who actually purchased a house during that time. This approach mixes the price paid for an asset—in this case a house—with the costs of holding and using that asset per period over the life of the

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[10]Vito Tanzi, "Inflationary Expectations, Economic Activity, Taxes, and Interest Rates," *American Economic Review*, March 1980, pp. 12-21.

[11]U.S. Congressional Budget Office, *Economic Policy and the Outlook for the Economy*, March 1981, pp. 27-28.

[12]Bureau of Labor Statistics, *The Consumer Price Index: Concepts and Content Over the Years*, May 1978 (revised), p. 13.

asset. For most purchasers, buying a house serves the dual purpose of consumption and investment, and rising house prices thus reflect both asset appreciation and the consumption of housing services.[13] The failure to factor out increases in investment value serves to bias the homeownership component. During inflationary periods, this causes an upward bias that—due to the large relative weight attached to the component—has a significant upward bias effect on the overall CPI.

The primary alternative to the asset approach is the "flow-of-services" approach. Under this approach, it is assumed that homeowners consume housing services each year by living in their houses and using them as primary shelter. Thus, it is assumed that a new house is consumed not in the year of purchase but over a period of time.

The flow-of-services approach can be implemented by using a *rental equivalence* estimate of housing services costs or a *user cost* function. The rental equivalence approach requires the development of a methodology to determine a market-related rental value for owner-occupied housing. The present CPI residential rent measure is illustrative of the objective of rental equivalence, but it should not be used to measure owner-occupied housing. The primary reason is that the sample of rental housing units contains a large number of multi-family structures, but there are also important quality and geographic dispersion differences as well.

The user cost approach to the pricing of housing services is a very complex concept that is difficult to implement in a statistically reliable fashion.[14] Essentially this approach would attempt to determine and measure the principal cost elements that owners experience during the process of providing housing for themselves. Among these cost elements are mortgage and equity financing costs, taxes, maintenance, and miscellaneous expenses.

Theoretically, the user cost function is the owner opportunity cost of holding the house minus any asset appreciation. If it could be accurately and relatively inexpensively calculated, this would be the ideal approach. To operationalize this approach, however, an appropriate methodology would be required to determine the opportunity cost of equity capital, to determine the appropriate mortgage interest rate, and to measure all other user cost elements. Symbolically, this is expressed as follows:[15]

$$C_t = r_{et}E_t + r_{mt}M_t - A_t + Z_t$$

where C_t = user cost

r_{et} = opportunity cost of equity

E_t = equity value

r_{mt} = mortgage interest rate

M_t = mortgage value

A_t = change in average price of house over the period

Z_t = all other user costs

t = any time period t

($M_t + E_t$ = average price of a house)

As a reflection of the ongoing concern about this issue, BLS introduced five alternative experimental measures in February 1980.[16] These five alternatives are variations of the flow-of-services and housing outlay approaches that produce three basic methods: rental equivalence, user cost, and housing outlays. Two different experimental measures have been developed for both user cost and outlays that use current interest costs and average interest costs, respectively. This is explained in greater detail in the appendix to this article.

Table 2 illustrates the influence that each of these alternative measures would have on the CPI-U. It should be noted that, in using these experimental measures, BLS would substantially revise the relative importance of this component in the CPI. From the December 1977 weight of 22.8, the range of weights is 8.7 for X-5 to 14.5 for X-1. Although the precise methodology for deriving these weights has not been delineated, it is clear that such a modification as this, quite apart from the actual effect of each experimental measure, would reduce the upward bias that the present CPI homeownership has on the CPI.

When the experimental measures are substituted for CPI homeownership, the predominant influence of each of the experimental measures is to lower the CPI-U. Based on this analysis, X-3 (user cost using average interest costs) appears to have the greatest influence. Moreover, the results are somewhat similar when statistics of central tendency and dispersion are compared. For the period December 1968 through December 1978, the mean annual increase of the CPI-U is greater than the increase for each of the five experimental measures, the lowest of which is X-3, followed by X-1, X-2, X-5, and X-4. The mean of X-3 and the mean of X-1 are quite similar, but X-1 reflects much lower variability. Measured by the coefficient of variation, X-5 exhibits the lowest dispersion, followed by X-1. Experimental measure X-3 ranks fourth.

During the period January 1979 through December 1979, all five experimental measures had lower monthly averages than the CPI-U. However, both X-2 and X-3—as in the previous period—exhibited greater variability than CPI-U, while X-1, X-4, and X-5 exhibited less. For this period, X-1 had the lowest mean rate of increase and the lowest dispersion, followed closely by X-5.

Conclusion

The purpose of this article has been to analyze the relationship between housing and inflation and indicate how this relationship is reflected in the Consumer Price Index. This analysis indicates quite clearly that housing

[13]Frank deLeew and Larry Ozanne, "The Impact of the Federal Income Tax on Investment in Housing," *Survey of Current Business*, December 1979, pp. 50-61; also see Tanzi, pp. 12-21.

[14]Robert Gillingham, "Estimating the User-Cost of Owner-Occupied Housing," *Monthly Labor Review*, February 1980, pp. 31-35.

[15]Ibid.

[16]Bureau of Labor Statistics, *CPI Detailed Report*, February 1980; and Norwood.

Table 2

OFFICIAL CPI-U (ALL ITEMS) AND EXPERIMENTAL MEASURES USING ALTERNATIVE HOMEOWNERSHIP COMPONENTS

(Percent Change Over 12 Months)

12 Months Ended	Official Consumer Price Index for All Urban Consumers (CPI-U)	Experimental Measurers Using Alternative Homeownership Components				
		Flow-of-Services Measures			Outlays Measures	
		X-1 Rental Equivalent Using CPI Rent	X-2 User Cost Using Current Interest Costs	X-3 User Cost Using Average Interest Costs	X-4 Outlays Using Current Interest Costs	X-5 Outlays Using Average Interest Costs
December:						
1968	4.7	3.9	4.9	4.6	4.7	4.2
1969	6.1	5.2	5.6	5.2	6.0	5.7
1970	5.5	4.5	4.5	4.2	5.2	4.9
1971	3.4	3.5	1.6	2.2	3.2	3.8
1972	3.4	3.3	3.2	3.5	3.4	3.5
1973	8.8	8.5	10.5	10.0	9.2	8.7
1974	12.2	11.1	12.6	12.1	12.3	11.8
1975	7.0	6.6	6.3	6.4	6.8	6.9
1976	4.8	5.1	4.3	4.7	4.8	5.2
1977	6.8	6.5	5.8	5.7	6.6	6.5
1978	9.0	8.0	7.8	7.4	8.5	7.8
January 1979	9.3	8.3	8.4	8.2	8.9	8.2
February 1979	9.9	8.6	9.1	8.7	9.4	8.6
March 1979	10.2	8.8	9.4	9.2	9.6	8.9
April 1979	10.4	8.9	9.6	9.4	9.8	9.1
May 1979	10.8	9.2	10.1	9.7	10.1	9.3
June 1979	10.9	9.3	10.2	9.8	10.2	9.4
July 1979	11.3	9.7	10.9	10.3	10.7	9.9
August 1979	11.8	10.1	11.5	10.4	11.0	10.2
September 1979	12.1	10.4	11.7	11.1	11.4	10.6
October 1979	12.2	10.5	12.2	11.1	11.5	10.5
November 1979	12.6	10.5	12.5	11.3	11.8	10.6
December 1979	13.3	10.8	13.2	12.3	12.5	11.3

Source: Bureau of Labor Statistics, *CPI Issues*, February 1980.

inflation has been advancing more rapidly than the general price level and family and individual income. The significance of this relationship has been manifested in growing concern about the possible inaccuracy of the CPI and whether or not it should be revised.

A comparison of alternative measurements of homeownership reveals that, for the period 1968-78, any of the five experimental measures proposed by the BLS would produce lower average rates of inflation. Of the five measures, user cost using average interest costs (X-3) would have the lowest mean rate of increase, although its variability would tend to be higher except for X-2.

This analysis reveals quite clearly that the concerns about the overstatement of inflation are valid: the methodologies used in the current CPI seriously overstate the contribution of housing to inflation (or deflation).

However, in the consideration of any revision, the basic integrity of the CPI should be maintained. Consequently, the current price of housing and the current costs of mortgage financing should be used to measure the current prices of houses purchased in the base period. This is the underlying theory of the CPI and, to the extent that it does this, the CPI correctly measures homeownership.

However, the effect of the homeownership component—because of its very significant weight—is to distort the actual inflationary impact on the average consumer. Since the total number of houses sold each year is relatively small compared to the total housing stock, the average consumer is not buying a new house or contracting mortgage interest costs. The rise in new house prices represents, in large part, a rise in asset appreciation rather than shelter consumption costs. For escalator purposes, it is essential that the investment aspects of homeownership be factored out of the overall price index.

Because of the complexity of the CPI and the implications of any revision, there is a need to proceed slowly with any major and permanent change in the present price series. However, it is essential that the escalator distortion effect of the CPI be remedied as soon as possible. Gillingham has suggested that the most feasible

alternative from a statistical view is the owner-occupied *rental equivalence* alternative.[17] This is also defensible from a conceptual view in that it is comparable to the "residential rent" element used to measure housing prices to nonhomeowners. Moreover, rental equivalence factors out housing investment value without the complication of debt/equity analysis and the calculation of returns to debt capital and to equity capital.

Appendix

EXPLANATIONS OF EXPERIMENTAL HOMEOWNERSHIP MEASURES

Rental Equivalent Using CPI Rent (X-1)

The weight for this measure is the estimate of the rental value of all owner-occupied homes in the base period 1972-73. Prices used are the current rents collected for the residential rent component of the CPI.

User Cost Using Current Interest Costs (X-2)

The weights for this method include expenditures for mortgage interest, property taxes, property insurance, maintenance and repairs, the estimated base-period cost of homeowners' equity in their houses, and the offset to shelter costs resulting from the estimated appreciation of house values in the base period. The debt component equals the amount owed, and the equity component is the amount owned. All prices used are current except appreciation, which is determined through a 5-year moving average of changes in appreciation rates.

User Cost Using Average Interest Costs (X-3)

The weights for this method are the same as for X-2, except that mortgage interest costs are calculated as the total interest amount paid out by homeowners in the base period. Mortgage interest costs are calculated using a 15-year weighted moving average, and appreciation is calculated using a 5-year moving average of changes in house prices.

Outlays Using Current Interest Costs (X-4)

The weights for this method include expenditures actually made in the base period for property taxes, property insurance, and maintenance and repairs. The weight for mortgage interest is calculated as in X-2. No appreciation or equity terms are included. All prices used are current.

Outlays Using Average Interest Costs (X-5)

The weights for property taxes, property insurance, and maintenance and repairs are the same as in X-4. The weight for mortgage interest is the same as in X-3. No appreciation or equity terms are included. Prices used are current except for mortgage interest, which is determined by the 15-year moving average used in X-3.

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[17]Gillingham, in "Estimating the User-Cost," p. 31, states that the rental equivalence approach "has a substantial operational advantage as a measure of shelter costs for homeowners." However, it should be noted that the present X-1 is not a completely suitable rental equivalence approach but relies upon prices generated by the CPI residential rent component. The problem here is that the methodology does not explicitly determine residential rents for owner-occupied housing.

Source: Adapted from Bureau of Labor Statistics, *CPI Issues*, February 1980.

MARKETING MALPRACTICE: THE NEED FOR MARKETING QUALITY CONTROL

*Stephen W. McDaniel and C. P. Rao**

Introduction

During the past 15 years, marketing activities have been the object of more government legislation than in all of history. Truth in packaging, truth in labeling, product information, product safety, fair credit reporting, warranty clarification, redress mechanisms, and advertising substantiation are just a few of the marketing-related activities that have been regulated during this time. Not only is all this regulation constraining to marketing decision making and creating more work for companies as they attempt to comply, but in many cases it may lead to subsequent price increases for affected products, with little or no real benefit accrued to the consumer. For example, two recent studies have indicated that for at least one piece of legislation—the Magnuson-Moss Warranty Federal Trade Commission Improvement Act of 1975—the consumer may have been better off before the act was passed.[1]

Much government regulation is passed for the purpose of correcting some perceived wrong that is being done by one party to another party. In the case of consumer protection legislation, the main intent is to protect the consumer from unfair or unethical marketing practices by business. The extent to which these types of marketing practices (or "malpractices") are perceived to be a serious problem in the marketplace will tend to determine the extent of future government regulation. Just how serious a problem do these marketing malpractices appear to be? How well protected from these malpractices do consumers perceive themselves to be? Do consumers perceive a need for even stronger consumer protection measures in the future? What type of consumers are most discontented with marketing practices? These are some of the questions that will be explored in this article.

Background of the Study

Attitudes Toward Marketing Malpractices

During the past 15 years, the marketing concept has been perhaps the most highly touted of all marketing philosophies. Included in the marketing concept is recognition of the need to do all that is possible to achieve satisfied customers. It would seem, then, that marketers especially would do all they could to minimize consumer complaints and, therefore, conduct their marketing activities in a way that would be beyond legal or ethical reproach. This, however, does not seem to be the case. In fact, during the "prime" years of the marketing concept, several studies have indicated that buyer dissatisfaction and consumer discontent with marketing activities have been extraordinarily high.[2]

In a recent article on studies of consumer attitudes in this area, Stanley and Robinson[3] conclude that consumer discontent appears to be rather widespread, and in some areas, particularly advertising, discontent appears to be growing. In an article that reports on a 1979 study and reviews four other similar studies conducted at two-year intervals in the 1970s, Barksdale and Perreault[4] report that consumer discontent is substantial and has remained at a fairly constant level during the 1970s. They find that of particular concern to consumers are advertising and sales practices that many consumers (37 percent) believe should be more heavily regulated by government. The most recent of their five studies also shows that 39 percent of consumers disagree that most advertisements usually present a true picture of the products advertised. Other marketing activities that they found to be looked upon with some disfavor are the quality of repair and maintenance service provided by manufacturers and dealers (41 percent disagree that it is getting better) and the quality of products (31 percent disagree it is improving).

Most recent studies of consumer discontent have focused primarily on general objects of discontent and have not analyzed which specific marketing activities are

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[1]Stephen W. McDaniel and C. P. Rao, "A Post-Evaluation of the Magnuson-Moss Warranty Act," *Akron Business and Economic Review* 11 (Summer 1980): 42-47; and Michael J. Wisdom, "An Empirical Study of the Magnuson-Moss Warranty Act," *Stanford Law Review* 31 (July 1979): 1117-46.

[2]Hiram C. Barksdale and William R. Darden, "Consumer Attitudes Toward Marketing and Consumerism," *Journal of Marketing* 36 (October 1972): 28-35; Hiram C. Barksdale, William R. Darden, and William D. Perreault, Jr., "Changes in Consumer Attitudes Toward Marketing, Consumerism, and Government Regulations," *The Journal of Consumer Affairs* 10 (Winter 1976): 117-39; Hiram C. Barksdale and William D. Perreault, Jr., "Can Consumers Be Satisfied?" *MSU Business Topics* 28 (Spring 1980): 19-30; Gregory M. Gazda and David R. Gourley, "Attitudes of Businessmen, Consumers, and Consumerists Toward Consumerism," *The Journal of Consumer Affairs* 9 (Winter 1975): 176-86; and Rex H. Warland, Robert O. Herrmann, and Jane Willits, "Dissatisfied Consumers: Who Gets Upset and Who Takes Action," *The Journal of Consumer Affairs* 9 (Winter 1975): 148-63.

[3]Thomas J. Stanley and Larry M. Robinson, "Opinions on Consumer Issues: A Review of Recent Studies of Executives and Consumers," *The Journal of Consumer Affairs* 13 (July 1979): 1117-46.

[4]Barksdale and Perreault, "Can Consumers Be Satisfied?"

MID-SOUTH ECONOMY

BUREAU OF BUSINESS & ECONOMIC RESEARCH THE FOGELMAN COLLEGE OF BUSINESS AND ECONOMICS MEMPHIS STATE UNIVERSITY

STATISTICAL SUPPLEMENT

THE MID-SOUTH ECONOMY

The Mid-South economy showed signs of improvement in the third quarter based on the latest months for which data are available. From the first quarter of 1980 to the first quarter of 1981, personal income in the Mid-South grew 11.7 percent, exceeding the national increase of 11.1 percent. Manufacturing employment in July registered gains throughout the Mid-South. Revenues from sales tax collections, a proxy for retail sales in the Mid-South, were up moderately from their levels of last year. However, unemployment in the Mid-South remains of some concern. The aggregate Mid-South unemployment rate increased from 7.6 percent in April 1981 to 8.6 percent in July 1981. Over the same period, the nation's rate increased from 7.0 percent to 7.3 percent.

Civilian Labor Force

The nation's civilian labor force grew by 787,000 during July 1981 to total 108,408,000, an increase of 1.3 percent from July 1980. Over the same period, the Arkansas and Louisiana civilian labor force grew faster than the national rate, up 2.4 percent and 4.3 percent, respectively. Mississippi's civilian labor force declined by 2.2 percent, or some 22,800 persons, from last July.

The number of persons unemployed in the United States totaled 7,934,000 in July 1981, a 5.7 percent decline from July 1980. Louisiana experienced a 30.2 percent increase. In Alabama, the number of persons unemployed declined by 14.9 percent from a year earlier, but the unemployment rate remained the highest in the Mid-South, at 9.3 percent.

Non-Agricultural Employment

Non-agricultural employment in the United States totaled 91,680,000 in July 1981, an increase of 2.2 percent from a year earlier. Louisiana registered a 6.3 percent gain and was the only Mid-South state to outpace the nation. Alabama, Mississippi, and Tennessee showed little change from the levels of a year ago.

Manufacturing employment for July 1981 in the Mid-South showed improvements from a year earlier across the board. Both Arkansas and Tennessee registered a healthy gain of 4.9 percent. This was mainly concentrated in the electrical and non-electrical machinery sectors.

Non-manufacturing employment presented a different picture for the Mid-South in July 1981. From a year ago, Alabama, Mississippi, and Tennessee registered declines while Arkansas remained unchanged. In Louisiana, however, non-manufacturing employment increased more than 3.5 times the national rate of 1.9 percent.

Earnings

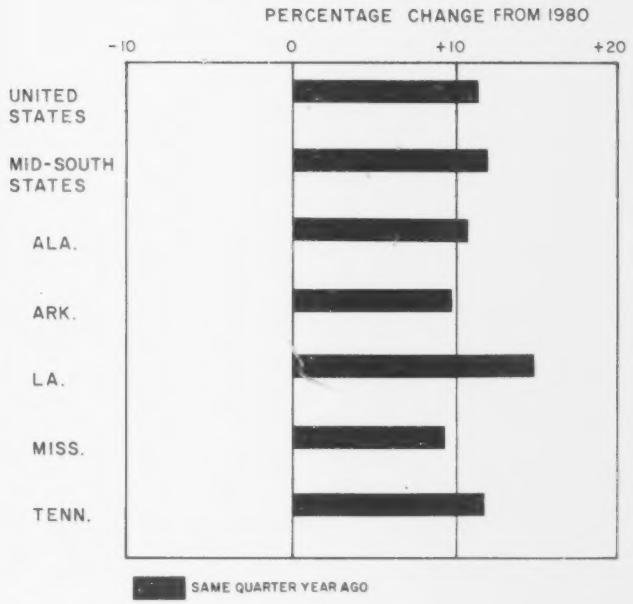
Average weekly earnings for the nation's production workers in manufacturing totaled $316.80 in July 1981, an increase of 12.0 percent from last July. Over the same period, Arkansas, Mississippi, and Tennessee outpaced the national increase, with Tennessee leading the way, up 13.1 percent over the year. In average weekly earnings for production workers, Louisiana failed to keep pace with the nation and the other Mid-South states, registering an increase over the year of 9.3 percent. However, Louisiana production workers remain, on average, the highest paid, at $350.55 per week. For average hourly earnings of production workers, Mississippi was the only Mid-South state to exceed the national increase of 9.7 percent.

Construction

The value of total construction contracts awarded in Region 6 in August 1981 decreased 7.7 percent from last August but remained 8.1 percent ahead for the first eight months of 1981 compared to 1980. Arkansas was the only Mid-South state to register a gain in total construction, up 1.9 percent from a year ago. Louisiana and Mississippi experienced declines from a year earlier, 16.3 percent and 29.4 percent, respectively, but both states remained ahead of their year-to-date spending levels.

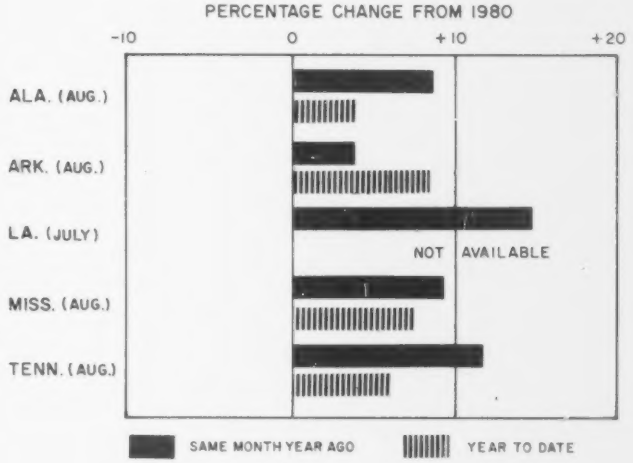
Residential construction awards in August 1981 for Region 6 fell 8.0 percent from last August but remained 14.0 percent ahead for the first eight months of 1981 compared to 1980. From a year earlier, Louisiana was the only Mid-South state that registered an increase in both residential construction and total dwelling units started to date, up 20.1 percent and 23.6 percent, respectively. Tennessee experienced the worst performance, with a 40.7 percent decline in residential construction from last August and 18.5 percent fewer dwelling unit starts to date as compared to 1980.

PERSONAL INCOME - I QTR 1981

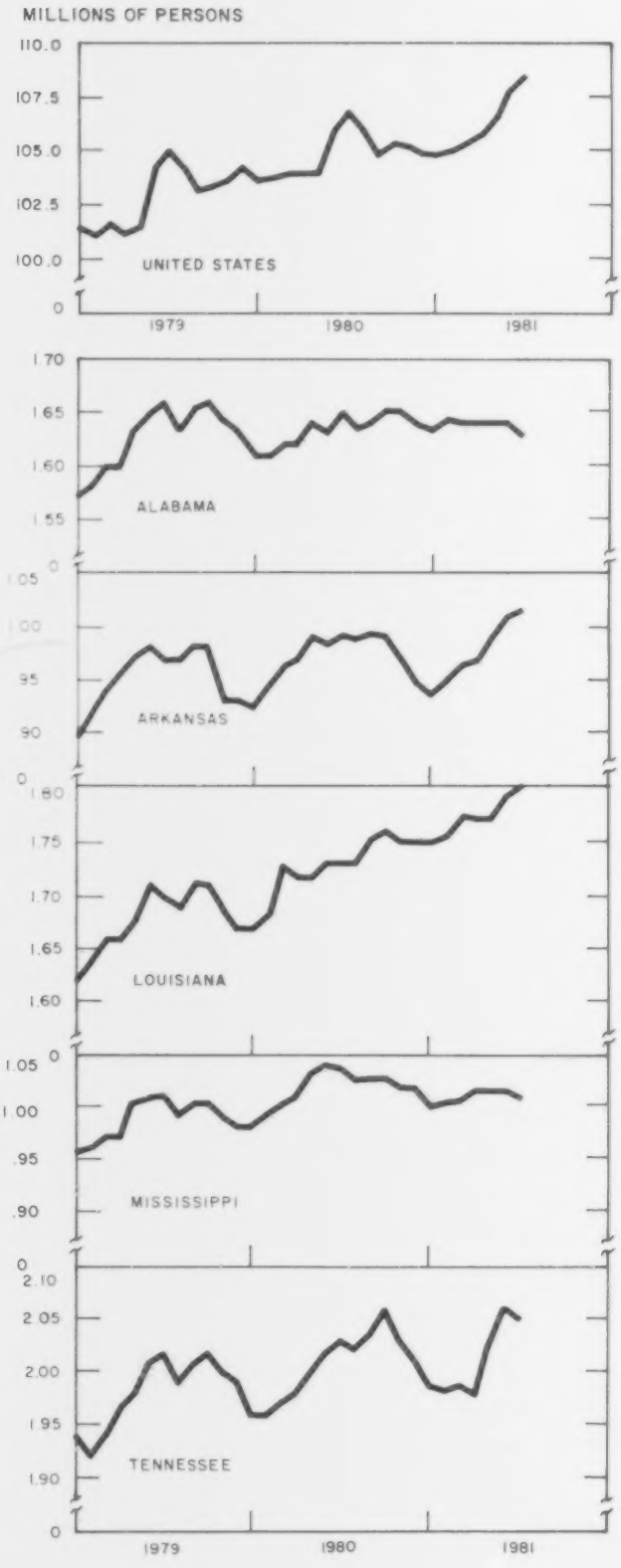


SOURCE: BUREAU ECONOMIC ANALYSIS

SALES TAX COLLECTIONS 1981



CIVILIAN LABOR FORCE



LABOR July 1981	United States	Mid-South States				
		Alabama	Arkansas	Louisiana	Mississippi	Tennessee
Civilian Labor Force	108,408,000	1,635,900	1,016,100	1,805,300	1,018,600	2,056,800
Percent Change Year Ago	+ 1.3	- 1.8	+ 2.4	+ 4.3	- 2.2	+ 1.1
Unemployed	7,934,000	152,500	83,600	154,000	83,700	176,400
Percent Change Year Ago	- 5.7	-14.9	- 1.1	+30.2	- 9.1	- 0.4
Unemployment Rate						
1981	7.3	9.3	8.2	8.5	8.2	8.6
1980	7.9	10.7	8.5	6.8	8.8	8.7
Non-Agricultural Wage & Salary Employees	91,680,000	1,344,500	745,300	1,637,300	817,100	1,705,300
Percent Change Year Ago	+ 2.2	+ 0.1	+ 1.4	+ 6.3	+ 0.0	+ 0.0
Manufacturing Employment	20,528,000*	356,400	216,100	215,200	219,300	507,500
Percent Change Year Ago	+ 3.3	+ 3.5	+ 4.9	+ 3.1	+ 2.9	+ 4.9
Non-Manufacturing Employment	71,438,000*	988,100	529,200	1,422,300	597,800	1,197,800
Percent Change Year Ago	+ 1.9	- 1.0	+ 0.1	+ 6.8	- 1.1	- 1.9
Average Weekly Earnings of Production Workers in Manufacturing	$316.80	$284.82	$247.67	$350.55	$232.23	$266.93
Percent Change Year Ago	+12.0	+10.9	+12.5	+ 9.3	+12.7	+13.1
Average Weekly Hours of Production Workers in Manufacturing	39.6	40.4	39.5	41.0	38.9	39.9
Percent Change Year Ago	+ 2.1	+ 2.3	+ 2.6	+ 0.5	+ 2.1	+ 3.1
Average Hourly Earnings of Production Workers in Manufacturing	$8.00	$7.05	$6.27	$8.55	$5.97	$6.69
Percent Change Year Ago	+ 9.7	+ 8.5	+ 9.6	+ 8.8	+10.4	+ 9.7

*Seasonally Adjusted.

Source: Departments of Employment Security and Survey of Current Business.

CONSTRUCTION 1981	United States (July)	Mid-South Region 6* (August)	Alabama	Arkansas (August)	Louisiana (August)	Mississippi (August)	Tennessee (August)	West Tennessee (August)
Value of Construction Contracts Awarded								
Total Construction								
Percent Change Year Ago	+ 9.7	- 7.7	NA	+ 1.9	-16.3	- 29.4	-30.3	-48.5
Percent Change Year-to-Date	+ 8.2	+ 8.1		- 1.6	+14.0	+ 28.9	- 2.9	-17.4
Total Building								
Percent Change Year Ago	+15.2	- 1.0	NA	- 19.8	+45.2	- 26.7	-37.7	-65.6
Percent Change Year-to-Date	+ 9.8	+10.8		- 11.1	+21.2	+ 5.3	- 2.2	-15.7
Residential Building								
Percent Change Year Ago	+15.9	- 8.0	NA	- 20.4	+20.1	- 27.7	-40.7	-69.3
Percent Change Year-to-Date	+12.0	+14.0		+ 6.9	+33.9	+ 4.7	- 9.4	-21.5
Non-Residential Building								
Percent Change Year Ago	+14.7	+11.3	NA	- 18.4	+91.4	- 25.2	-34.4	-58.5
Percent Change Year-to-Date	+ 7.7	+ 7.2		- 35.1	+10.0	+ 6.3	+ 6.3	- 9.4
Public Works and Utilities								
Percent Change Year Ago	- 9.6	-19.1	NA	+154.3	-44.8	- 33.2	+52.0	+46.7
Percent Change Year-to-Date	- 3.4	+ 1.0		+ 44.1	- 3.6	+100.4	- 5.4	-25.6
Total Dwelling Unit								
Starts to Date	1,055,000	51,931	NA	9,061	18,199	12,775	14,457	3,471
Percent Change Year Ago	-16.7	+ 1.8		- 5.0	+23.6	- 3.1	-18.5	-24.2

*Region 6 includes Arkansas, South Illinois, Louisiana, Mississippi, East Missouri, and West Tennessee.

Source: F. W. Dodge Reports and Federal Reserve Bulletin.

The dollar value for non-residential building in Region 6 was up 11.3 percent from last August. Again, Louisiana was the only Mid-South state to register an increase from a year ago, climbing from $45.6 million in August 1980 to $87.3 million in August 1981, for a 91.4 percent increase.

Public works construction in Region 6 for August 1981 declined by 19.1 percent from a year earlier. Arkansas and Tennessee were the only Mid-South states to register increases over the year, up 154.3 percent and 52.0 percent, respectively. Mississippi experienced a 33.2 percent dip from last August but maintained a year-to-date spending level twice the 1980 level.

Finance

In banking activity as of July 29, 1981, the Mid-South District 8 outpaced the nation in total loans made, up 4.2 percent from last July versus the nation's 2.5 percent increase. Total deposits in District 8 banks were up 10.3 percent from a year earlier, almost matching the national increase of 10.5 percent. The decline in net demand deposits for District 8 banks was twice the national

decrease of 8.3 percent. Time deposit growth in District 8 was up 20.3 percent. As a side note, the August 21, 1981, issue of the *American Banker* listed the Whitney National Bank of New Orleans, with total deposits in excess of $1.4 billion, as the largest commercial bank in the Mid-South.

Data from the various Federal Home Loan Banks indicate mortgage lending activity for July 1981 in the Mid-South was down from a year earlier, except for Louisiana, which registered a 47.0 percent increase. However, mortgage loans in the Mid-South for the first seven months of 1981 were ahead of the lending activity for the comparable period in 1980, except for Arkansas, which registered a decline of 21.4 percent. Net savings flow activity continues to contract through the Mid-South across the board. The largest savings and loan institution in the Mid-South, as reported in the *American Banker*, was Leader Federal Savings and Loan of Memphis, with total deposits in excess of $842.0 million.

FINANCE 1981	United States[1]	Mid-South States District 8 Only[2]	Alabama District 6	Arkansas District 8	Louisiana District 6 Only	Mississippi District 8 Only	Tennessee District 8 Only
Member Banks as of 7/29/81 Percent Change from Comparable Date 1980							
Total Loans	+ 2.5	+ 4.2	NA	+ 3.0	NA	+ 9.7	+ 7.0
Total Deposits	+10.5	+10.3		+ 7.5		+13.0	+ 7.5
Net Demand Deposits	- 8.3	-17.0		-16.1		-15.5	-19.5
Time Deposits	+26.3	+20.3		+17.3		+22.0	+15.4

[1]United States data are for all domestically chartered commercial banks except for branches of foreign banks.

[2]Mid-South data are available only for District 8, which includes all of Arkansas, North Mississippi, and West Tennessee.

Source: Federal Reserve Board of Governors and the Federal Reserve Bank of St. Louis.

SAVINGS AND LOAN ACTIVITY July 1981	Alabama	Arkansas	Louisiana	Mississippi	Tennessee[1]
Mortgage Loans Made (millions)	$ 25.8	$ 26.5	$ 89.8	$ 15.0	$ 41.8
Percent Change Year Ago	- 10.4	- 34.1	+ 47.0	- 27.9	- 8.1
Percent Change Year-to-Date	+ 32.2	- 21.4	+ 34.3	+ 16.0	+ 25.0
Net Savings Flow (millions)[2]	($ 46.9)	($ 32.8)	$ 11.1	($ 20.5)	($ 26.5)
Percent Change Year Ago	-435.0	-275.4	- 72.4	-295.2	-181.5
Percent Change Year-to-Date	- 89.7	-125.2	- 31.6	- 80.9	- 79.0

[1]Figures are for total loans made.

[2]Net savings flow equals new savings received plus dividends credited minus savings withdrawn.

Source: Federal Home Loan Banks of Little Rock, Cincinnati, and Atlanta.

THE TENNESSEE ECONOMY

The performance of the Tennessee economy has remained relatively flat throughout 1981 based on the latest months for which data are available. The civilian labor force in Tennessee totaled 2,056,800 in July 1981, an increase of 1.1 percent from a year ago. The number of persons unemployed and the unemployment rate remain at the same levels they were a year ago. The August 1981 index of prices received by farmers in Tennessee stood at 244 (1967=100), unchanged from July 1981 and two index points below the August 1980 level.

Non-agricultural employment in Tennessee totaled 1,705,300 for July 1981, unchanged from a year ago. Manufacturing employment lost 11,100 workers from June 1981 but remained 4.9 percent ahead of July 1980. Non-manufacturing jobs in July 1981 were down 1.9 percent from a year earlier, losing 10,600 workers from June 1981.

The dollar value of construction activity in Tennessee registered declines across the board. The value of total construction contracts awarded totaled $174.9 million in August 1981, down 30.3 percent from August 1980. Residential and non-residential construction in August 1981 registered substantial declines from a year earlier, with public works construction 5.4 percent lower for the first eight months of 1981 compared to the same period in 1980.

There are, however, some bright spots in the Tennessee economy. Personal income in Tennessee grew 11.8 percent from the first quarter of 1980 to the first quarter of 1981, exceeding the national and Mid-South growth rates. Weekly earnings of production workers in Tennessee averaged $266.93 for July 1981, an increase of 13.1 percent from last July. This area also outperformed the national and Mid-South growth rates. Hourly earnings for production workers in Tennessee averaged $6.69 in July 1981, up 9.7 percent from last July and matching the national gain over the same period. Revenues from sales tax collections in August were up 11.6 percent from last August and 5.9 percent ahead for the first eight months of 1981 compared to 1980.

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perceived unfavorably by consumers. The recent Barksdale and Perreault study is the most thorough and did investigate consumer perceptions toward some specific marketing activities—e.g., planned obsolescence, product assortment, product guarantees, games and contests, pricing, as well as the aforementioned product quality, advertising, and repair/maintenance services.

One of the objectives of the present study is to extend the Barksdale and Perreault study and investigate consumer attitudes toward several more specific marketing activities. This study investigates consumer perceptions of 19 specific "marketing malpractices." This term applies to all marketing-related practices that a significant portion of the general population would view as unethical. Examples include those already heavily regulated—e.g., deceptive advertising, misleading warranties, deceitful credit practices, unsafe and hazardous products, unsupported product claims, deceptive packaging and pricing—as well as those practices not as closely regulated, such as poor product performance, indifference to consumer complaints, hesitancy to give a refund when a product is found to be defective, high-pressure salespersons, and deceitful salespersons.

Demographic Characteristics of Discontented Consumers

There have been several studies that have attempted to sketch demographic profiles of consumers who tend to be most unhappy about certain business and marketing practices. The results are somewhat inconsistent. Hustad and Pessemier[5] found the concerned consumers to be younger women who are intellectually and economically upscale. Barksdale and Darden[6] found that younger respondents were more critical of marketing activities. Warland, Herrmann, and Willits[7] identified the discontented consumer as being younger, better educated, and earning higher income. Far different results were obtained by Coulson,[8] who found that consumers with negative attitudes toward business practices were older, poorer, and less educated.

In hopes of adding somewhat more consistency to the findings regarding who tends to have the most negative attitudes toward business practices, the present study also examines the demographic characteristics of the sample members. Specifically, consumers having certain perceptions of the seriousness of certain marketing malpractices and certain attitudes about consumer protection measures are analyzed as to age, sex, income, and education.

The Effect of Marketing Malpractices on Consumer Attitudes

Warland, Hermann, and Willits[9] found that consumers most satisfied with business practices will be most satisfied with the market system, will have fewer complaints, and will be least interested in consumerism-type activities. If this is the case, then it is in the best interest of business to have customers who are indeed satisfied with business practices. When consumers have bad experiences leading to dissatisfaction with business practices, they will probably be more prone to complain, not only to the company but also to government regulators. The present study also attempts to provide some empirical support of this logical contention. It extends the Warland, Herrmann, and Willits study to an investigation of whether consumer experiences with marketing malpractices do indeed create discontented consumers who are then more dissatisfied with current consumer protection efforts and desire more consumer protection regulations by the government.

Methodology

In order to gain insight into the perceived seriousness of marketing malpractices and consumer attitudes toward consumer protection in these areas, personal interviews were conducted with 206 consumers in a Southwestern SMSA. A combination area and quota sampling technique was used to ensure a representative sample of the area. Demographics of the sample are shown in Table 1.

Table 1
DEMOGRAPHICS OF SAMPLE
(In Percentages; n = 206)

Sex		Income	
Male	50.0	Under $10,000	37.1
Female	50.0	$10,000-$20,000	33.7
Age		Over $20,000	29.2
Under 20	6.2	Education	
20-29	39.2	Grade School	6.2
30-39	17.7	Some High School	39.2
40-49	14.4	High School Graduate	17.7
50-59	10.5	Some College	41.4
Over 60	11.9	College Graduate	20.5
		Post-Graduate Study	9.0

In the personal interviews, a structured questionnaire was used that took approximately 30 minutes to administer. A pilot study was performed to determine which marketing malpractices consumers reported encountering most frequently in the marketplace. This pilot study yielded 19 malpractices that were then investigated in the actual study. Interviewers were carefully trained in interviewing techniques and were particularly trained in maintaining a neutral position in asking the questions. This was to prevent, as much as possible, any interviewer bias of either "pro-" or "anti-" business being injected into the interview.

[5]Thomas P. Hustad and Edgar A. Pessemier, "Will the Real Consumer Activist Please Stand Up: An Examination of Consumers' Opinions about Marketing Practices," *Journal of Marketing Research* 10 (August 1973): 319-24.

[6]Barksdale and Darden, "Consumer Attitudes Toward Marketing and Consumerism."

[7]Warland, Herrmann, and Willits, "Dissatisfied Consumers."

[8]John S. Coulson, "New Consumerists' Breed Will Fade Away," *The Marketing News* 4 (June 1971): 5.

[9]Warland, Herrmann, and Willits, "Dissatisfied Consumers."

Table 2

PERCEIVED SERIOUSNESS OF SPECIFIC MARKETING MALPRACTICES
(In Percentages; n = 206)

	Very Serious	Serious	Somewhat Serious	Not at All Serious
1. Deceptive Advertising	28.0	47.8	22.7	1.5
2. Deceitful Practices by Auto Repair People	43.2	32.5	14.1	10.2
3. Deceptive Pricing	26.4	40.4	24.0	9.1
4. Misleading Product Guarantees and Warranties	25.1	39.1	28.0	7.4
5. Unsafe and Hazardous Products	29.8	31.7	28.8	9.6
6. Poor Product Performance	18.9	39.3	32.5	9.2
7. Deceitful Practices by T.V. and Other Appliance Repair People	24.1	32.0	30.0	13.8
8. Indifference to Consumer Complaints	19.4	36.0	36.5	7.9
9. Deceitful Practices by Household Service People	21.7	33.8	27.5	16.9
10. Unsupported Product Claims	19.9	35.4	37.9	6.8
11. Lack of Refund for Defective Part or Product	20.7	32.7	32.7	13.9
12. Deceitful Consumer Credit Practices by Retailers	20.3	32.3	39.6	7.9
13. High-Pressure Insurance Salespeople	18.2	31.5	32.5	17.7
14. High-Pressure Automobile Salespeople	16.8	26.7	39.6	16.8
15. Quantity Shortage in Packaging	15.1	27.0	36.3	22.5
16. High-Pressure Door-to-Door Salespeople	18.4	21.3	38.2	22.0
17. Defective or Deceptive Packaging	11.5	27.4	42.8	18.3
18. High-Pressure Real Estate Salespeople	11.4	21.3	42.1	25.2
19. High-Pressure Appliance and Furniture Salespeople	5.0	17.0	46.0	32.0

Results

Perceptions of Specific Marketing Malpractices

Members of the sample were asked to evaluate 19 different practices (or in this case "malpractices") as to the seriousness of the problem in society today. Subjects were asked to rate each item as being either "very serious," "serious," "somewhat serious," or "not at all serious." As indicated in Table 2, several marketing malpractices are considered to be rather serious problems. Two of these (deceptive advertising and deceitful practices by auto repair people) were perceived by over 75 percent of the sample to be either "serious" or "very serious" problems, with deceitful practices by auto repair people being perceived as a "very serious" problem by an extremely high 43.2 percent of the sample. The malpractice that appeared to be the least serious problem was high-pressure appliance and furniture selling. Only 22 percent perceived this to be of a "serious" or "very serious" nature.

Perception of Consumer Protection Measures

Subjects were also asked about their perception of current consumer protection measures. Specifically, they were asked, "From your experience or understanding, how adequately do you think consumers in our society are presently protected from the types of business malpractices mentioned above?" As shown in Table 3, consumers felt the current consumer protection measures were, at best, only marginally effective. Over 80 percent of the sample felt the present measures were "inadequate" or only "somewhat adequate" (46.3 percent felt they were "somewhat adequate," and 35.1 percent felt the measures were "inadequate"). Apparently there were no strong feelings one way or another, but what feelings there were tended to be somewhat negative toward the adequacy of current consumer protection measures.

Following this question, an attempt was made to determine consumer perception of the need for strengthening consumer protection efforts in the future. The question asked was, "How strongly do you feel that consumer protection efforts should be further strengthened in our society in the future?" Given the somewhat negative attitudes toward current efforts, as indicated in the previous question, it is not surprising that there was a perceived need for strengthening the consumer protection efforts in the future. These results are shown in Table 4. It is somewhat surprising, and perhaps to marketers somewhat disturbing, that over 70 percent of the sample perceived a "strong" or "very strong" need for more protection in the future. The perceived need for strengthening consumer protection efforts appeared to be greater than the perceived inadequacy of current efforts.

Table 3

PERCEIVED ADEQUACY OF CURRENT CONSUMER PROTECTION MEASURES
(In Percentages; n = 206)

Very Adequate	1.0
Adequate	9.3
Somewhat Adequate	46.3
Inadequate	35.1
Very Inadequate	8.3

Table 4

PERCEIVED NEED FOR STRENGTHENING FUTURE CONSUMER PROTECTION EFFORTS
(In Percentages; n = 206)

Very Strong	36.7
Strong	34.3
Somewhat Strong	16.2
Not Sure	11.0
No Need For Further Effort	1.9

Demographic Analyses

The data were also analyzed from the standpoint of demographics of the subjects in order to determine if any meaningful profile could be developed of the contented or discontented consumer. Very sparse findings resulted from a Pearson product-moment correlation statistical technique being administered to the data. Virtually all correlation coefficients produced were relatively small, although seven were significant ($p < .05$) and three were marginally significant ($p < .10$).

The demographic variable "age" did appear to be somewhat more of a determining variable than the others. All but two of the 19 coefficients of correlation for age were in the same direction (negative values), indicating inverse relationships between age and perceived seriousness of specific marketing malpractices. It was found that younger consumers tend to perceive deceitful practices by auto repair people, deceitful consumer credit practices by retailers, high-pressure tactics by insurance salespeople, and high-pressure automobile selling as more serious problems than do older consumers. These were all significant at the .05 level.

Income, education, and sex provided few statistically significant results; therefore no valid conclusion can be drawn from these results. It might be pointed out, however, that the direction of correlation indicates a slight tendency for higher educated consumers to perceive the marketing malpractices as being somewhat more of a serious problem. This, however, was found to be significant only for the item "high-pressure insurance salespeople."

Perceived adequacy of current measures and perceived need for further strengthening of consumer protection measures were analyzed according to the subjects' demographic characteristics. Again, the Pearson correlation coefficients were not conclusive and no significant correlations were found. There was a slight tendency ($p < .10$) for higher educated subjects to have a more negative attitude than less educated subjects toward the adequacy of the current consumer protection measures. And there was a slight tendency ($p < .10$) for the younger consumer to perceive a stronger need than the older consumer for further strengthening of consumer protection measures in the future.

The Effect of Marketing Malpractices on Consumer Attitudes

One area of investigation in this study was whether the frequency with which consumers encountered problem experiences in the marketplace had an effect on their attitudes toward the seriousness of marketing malpractices, the adequacy of current consumer protection measures, and the need for additional measures in the future. In reference to the list of 19 items, the sample members were asked, "How frequently, as a consumer, did you or other members of your household experience the above type of consumer problems?" In reply, 19 (4.8 percent) answered "very frequently," 70 (33.8 percent) answered "frequently," 119 (57.5 percent) answered "once in a while," and 7 (3.4 percent) answered "never."

To make the findings somewhat more meaningful, the first two categories were combined, as were the last two. The 19 marketing malpractice questions were then analyzed relative to the subject's frequency of problem experience ("frequently/very frequently," "once in a while/never"). A chi-square test was used in order to determine whether frequency of problem experience had an effect on subjects' evaluations of the various marketing malpractices. Frequency of problem experience was found to be a very definite factor in perceived seriousness of the problem for 18 of the 19 malpractices. Those who frequently or very frequently had problem experiences cited the malpractices as being more serious than those who less frequently had problems.

The difference in the two groups was shown to be significant for 14 of the 19 business malpractices investigated. (Deceitful practices by auto repair people, high-pressure tactics by automobile salespeople, unsafe and hazardous products, high-pressure door-to-door selling, and high-pressure tactics by appliance and furniture salespeople did not indicate a significant difference, although differences in the two groups were in the proper direction for four of these five.) It is noteworthy that for 12 of the 19 items, the difference in the two groups was highly significant ($p < .005$). Clearly the frequency with which consumers had experienced these particular marketing malpractices impacted upon their perception of the problem as it relates to society today.

This same procedure was then used to see whether or not frequency of problem experience also impacted on the consumers' perceived adequacy of current consumer protection efforts. When sample members were subdivided by frequency of problem experiences, the results from this question were similar to those from the previous questions. Consumers with a history of frequent problem experiences viewed present efforts in a much more unfavorable light than consumers with fewer problem experiences. Over half (51.85 percent) of the first group felt current consumer protection efforts were inadequate or very inadequate, while 37.61 percent of consumers with less frequent problem experiences felt the efforts were inadequate or very inadequate. This difference was statistically significant ($p < .05$).

Finally, the perceived need by consumers for strengthening consumer protection efforts in the *future* was investigated relative to the frequency with which those consumers had problem experiences in the marketplace. Over [illegible] percent of those consumers who had frequently or very frequently experienced problems felt stronger consumer protection measures were needed in the future. (This compares with just under 60 percent of those who experienced problems less frequently.) This difference was statistically very significant ($p < .005$), indicating that those who had experienced problems more frequently were clearly more dissatisfied with present consumer protection measures and wanted additional action taken in the future.

Conclusions and Implications

In considering the results of this study, one should keep in mind that all subjects were from one geographic area. However, it is noteworthy that, if consumers from this Southwestern SMSA do indeed differ from consumers as a whole, it is probably in terms of being more conservative and more "pro-business" in their attitudes.

With this in mind, the results are not at all favorable to business and particularly marketing activities. Deceptive advertising and pricing, deceitful practices by service and repair personnel, misleading product warranties, unsafe and poor product performance, indifference to consumer complaints, lack of business support for the product and its claims, and even deceitful credit practices by retailers were seen by the majority of the sample as being serious problems in our society today. These consumers see a definite need for protection from these practices, but they also perceive the current consumer protection efforts as not all that adequate in providing this protection.

What is the consumer's answer? Over 70 percent of the sample feel there is a strong need for strengthening consumer protection efforts. The significance of this figure is magnified when responses to the final question on the questionnaire are noted. This question asked the subjects which means of protecting consumers should be used in the future. It is somewhat unsettling to note that 89.41 percent said "more consumer protection legislation with stiff penalties." Is this going to be the course of the future? If indeed today's frustration is tomorrow's legislation, marketers should stop complaining about overregulation, because more is probably on the way.

One solution to the potential problem of more consumer protection legislation in the future is suggested by the findings of this study. In virtually every instance, the consumers who feel the most frustration—those who perceive marketing malpractices as a serious problem, who perceive current consumer protection efforts as marginally adequate or in fact inadequate, who feel consumer protection efforts should be strengthened in the future, and who feel that more government regulation is needed—are the ones who have had the most frequent experiences with marketing malpractices. Consumers experiencing these problems less frequently are significantly more satisfied with the current business-consumer relationship and do not feel as strongly about strengthening consumer protection efforts.

These findings are probably of no surprise to anyone, since they are both intuitive and logical. However, the present study does validate the presence of this relationship and suggests that an effective means of heading off encounters with consumerists and preventing additional consumer protection legislation in the future is for marketing practitioners to exercise more marketing quality control and eliminate these malpractices in the marketplace. When fewer consumers have fewer activities about which to complain, government regulators have fewer activities to regulate.

Divita[10] has suggested that one way to raise the integrity of a firm's marketing practices would be to create a "marketing quality control department" in the firm. This department, a part of the corporate staff, would work alongside the marketing department as production quality control works with the product department. Divita has suggested that the functions of such a department would be to set and enforce high standards for marketing practices, conduct consumer research, provide customer relations, manage the complaint-handling system, and act as a governmental liaison.

The authors further suggest that these marketing quality control programs should be implemented not only at the corporate level but also at various levels in the marketing channel—particularly at those points where consumers deal with lower echelon personnel such as service and repair personnel. The results from this study indicate that these employees are major sources of consumer discontent; therefore, it is important that this marketing quality control encompass all levels of the company.

This and other previously cited studies indicate a feeling of discontent among consumers toward business practices and particularly marketing practices. The findings of this study show that the more frequently consumers are subjected to these marketing malpractices, the more demanding they are that something be done to protect them. The choice is really up to business as to whether the future will bring more government regulation over marketing practices or whether marketing quality control might prevent or at least minimize these regulations. Fire prevention rather than fire fighting is obviously a better alternative, not only for the consumer, but also for business.

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[10]Salvatore F. Divita, "Marketing Quality Control: An Alternative to Consumer Affairs," *California Management Review* 20 (Summer 1978): 74-78.

RESERVE RECOGNITION IN ACCOUNTING

*Kenneth L. Dugas and Clyde L. Posey**

In August 1978, the Securities and Exchange Commission announced requirements that oil and gas producing companies are to be compelled to disclose current value data on oil and gas reserves. The collection and analysis of this current value data are part of the Securities and Exchange Commission's project seeking to incorporate oil and gas reserve values into the balance sheets and income statements of oil and gas producing companies through the development of a new method of accounting called reserve recognition accounting (RRA).[1]

This study is an analysis of the effects that RRA would have on the financial statements of McMoRan Oil & Gas Company if RRA were incorporated into its primary financial statements. Divided into four major sections, the article discusses the background of reserve recognition accounting, the application of reserve recognition accounting, the effects of reserve recognition accounting on the financial statements of McMoRan Oil & Gas Company, and an evaluation of reserve recognition accounting.

The Background of Reserve Recognition Accounting

Energy Policy and Conservation Act of 1975

Following the oil embargo of 1973-74, the Congress began measures to reduce U.S. dependence on foreign oil and to determine the amount of domestic oil and gas that was available. One measure was the passing into law of the Energy Policy and Conservation Act of 1975 (EPCA).[2] The congressional statement of purpose for EPCA maintains that one of the major objectives of the law is "(7) to provide a means for verification of energy data to assure the reliability of the energy data."[3]

To provide a means of verification, the law contains a subchapter devoted to "Energy Data Base and Energy Information."[4] This subchapter seeks verification of energy data through two methods. In the first method, the Comptroller General is given authority to conduct verification audits of the books and records of any individual or company furnishing energy information to any federal agency (other than the Internal Revenue Service) and oversight audits on any vertically integrated petroleum company filed with the Securities and Exchange Commission. To carry out this obligation the Comptroller General is given the authority to issue subpoenas for attendance and testimony of witnesses and production of any documents determined to be relevant. In addition to this, the Comptroller General is given access to any energy information in the possession of any federal agency (other than the Internal Revenue Service). Under this provision, the information presented is safeguarded. Any geological or geophysical information whose disclosure would result in significant loss or competitive disadvantage to the owner can be revealed only to a committee of Congress. Violation of this law is punishable by one year imprisonment and up to $40,000 in fines for each violation.[5]

The second method of verification enumerated by this law requires the Securities and Exchange Commission to prescribe accounting practices to be followed by the oil and gas production industries to provide compilation of a reliable energy data base.[6] To fulfill this objective the Securities and Exchange Commission shall:

> have authority to prescribe rules applicable to persons engaged in the production of crude oil or natural gas or make effective by recognition, or by other appropriate means indicating a determination to rely on, accounting practices developed by the Financial Accounting Standards Board, if the Securities and Exchange Commission is assured that such practice will be observed by persons engaged in the production of crude oil or natural gas to the same extent as would result if the Securities and Exchange Commission had prescribed such practices by rule.[7]

The law goes on to say that the SEC, when prescribing accounting practices pursuant to this canon, shall to the greatest extent practicable provide domestic and foreign data bases permitting the compilation of energy data bases consisting of the following:

> (1) The separate calculation of capital, revenue, and cost information pertaining to—
> (A) prospection,
> (B) acquisition,
> (C) exploration,
> (D) development, and
> (E) production,
> including geological and geophysical costs, carrying costs, unsuccessful exploratory drilling costs, intangible drilling and development costs on productive wells, the cost of unsuccessful development wells, and the cost of acquiring oil and gas reserves by means other than development.
> (2) The full presentation of the financial information of persons engaged in the production of crude oil or natural gas, including—

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[1] Richard C. Adkerson, "Can Reserve Recognition Accounting Work?" *The Journal of Accountancy* XXII (September 1979): 72.

[2] U.S. Public Law 94-163 (1975).

[3] "Conference Report of S. 622 to Increase Domestic Energy Supplies and Availability; to Restrain Energy Demand; to Prepare for Energy Emergencies," *Congressional Record—House*, vol. 121 (part 30), p. 39433.

[4] Ibid., p. 39490.

[5] Ibid., p. 39453.

[6] Ibid.

[7] "Energy Policy and Conservation Act of 1975," 42 *United States Code Annotated* Sec. 6383 (b) (2).

(A) disclosure of reserves and operating activities, both domestic and foreign, to facilitate evaluation of financial effort and result; and

(B) classification of financial information by function to facilitate correlation with reserve and operating statistics, both domestic and foreign.

(3) Such other information, projections, and relationships of collected data as shall be necessary to facilitate the compilation of such data base.[8]

Financial Accounting and Reporting by Oil and Gas Producing Companies—FASB Statement 19

The Energy Policy and Conservation Act "specifically provided that the Securities and Exchange Commission in prescribing accounting practices that would permit compilation of energy information, may rely on accounting practices developed by the Financial Accounting Standards Board (FASB)."[9] In December 1975, the Financial Accounting Standards Board appointed a task force of 18 persons to aid the Board in defining accounting alternatives to comply with the disclosure requirements of EPCA. This task force worked for the next two years considering these alternatives before issuing a statement in December 1977.[10]

Four major alternatives emerged.[11] The first two alternatives—discovery value accounting and current value accounting—were rejected for many reasons. The most important reason related to

> problems in measuring the value of reserves with reasonable accuracy at the point of discovery. Measurements of discovery value require estimates of (a) the quantity of reserves, (b) the amount and timing of costs to develop the reserves, (c) the timing of production of the reserves, (d) the production costs and income taxes, (e) selling prices, and (f) (for some valuation methods) appropriate discount rates that reflect both interest and a risk factor. . . . The uncertainties inherent in those estimates and predictions tend to make estimates of reserve values highly subjective and relatively unreliable for the purpose of providing the basis on which to prepare financial statements of an oil and gas producing company.[12]

The other two alternatives—full cost and successful efforts costing—were the historical cost methods considered. Full costing was rejected because it capitalized the costs of unsuccessful efforts with the costs of successful efforts. By so doing, "full costing tends to obscure failure and risk."[13] This violates the accounting maxim that "if costs do not give rise to an asset with identifiable future benefit, they are charged to expense or recognized as a loss."[14] Successful efforts accounting was the method selected by the Board as the best alternative for the presentation of financial statements at the present time. The Board recognized that historical cost basis accounting that adhered to the realization concept tends to obscure or delay the reporting of success; however, successful efforts costing is the only method that is consistent with the present accounting framework.[15]

In the Board's judgment, financial statements prepared using successful efforts costing with supplementary disclosure of oil and gas reserves and the changes in oil and gas reserves as described in this statement (FASB Statement 19) will provide the information required by the Energy Policy and Conservation Act.[16]

Securities and Exchange Commission

The SEC disagreed with the FASB that the successful efforts costing with supplemental disclosure would provide the best accounting treatment for the oil and gas producing industry. The contention of the SEC is that the primary function of the financial statement is to convey information relating to earning activities and potential to investors.[17] This information is used by investors to make investment decisions. The Commission has for quite some time felt that "the earning process in exploring for and then producing oil and gas differs significantly from that of most other industries and this justifies different treatment within the existing accounting framework."[18]

The basic difference between the earnings process of the oil and gas producing industry and that of most other industries is that in most other industries the cost of acquiring an asset is directly related to the revenue that may be expected to be derived from that asset. Therefore, in most industries one can obtain a reasonable estimate of a company's value by looking at the cost of its assets. In the oil and gas industry, this assumption does not hold true. Much may be spent on property that has no value at all; conversely, a very valuable oil or gas reserve may be acquired for a relatively small sum.[19] Because of this difference, the relevance of the information presented in the historical cost statements of oil and gas producing companies is clearly lacking.[20] Another distinction of the earnings process of the oil and gas producing industry is that "the marketability of oil and gas at prices above a minimum level appears reasonably assured for the present and . . . for the foreseeable future."[21]

Because of these distinctions—lack of relevance of historical cost data to convey the financial position of oil and gas companies and the ready market for their product at least at a minimum price—the Commission maintains traditional oil and gas accounting methods are irrelevant and misleading. According to the SEC, financial statements prepared using historical cost methods "so significantly

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[8]Ibid.

[9]"Conference Report of S. 622," p. 39490.

[10]American Institute of Certified Public Accountants, *Professional Standards Accounting: Current Text Volume 3* (New York, 1979), p. 10480.

[11]Ibid., pp. 10492-10501.

[12]Ibid., p. 10505.

[13]Ibid., p. 10508.

[14]Ibid., p. 10506.

[15]Ibid., p. 10508.

[16]Ibid.

[17]Accounting Series Release No. 253, *Federal Register* 43:40691.

[18]Ibid., p. 40692.

[19]Ibid.

[20]Ibid., p. 40693.

[21]Ibid., p. 40692.

detract from the relevance of information communicated by the accounting process that the primary financial statements are of little use in understanding the financial position and operating results of oil and gas producers."[22]

Many groups advocate that generally accepted accounting principles must be applied uniformly for all industries to allow the interindustry comparability necessary for optimal allocation of capital. This argument breaks down when one realizes that in other industries the most significant event is the sale of products. In the oil and gas industry the most significant event is the discovery of oil and gas. In most oil and gas producing companies, the most important assets owned are proved oil and gas reserves. Historical cost accounting methods do not provide a means to record this most significant event of the oil and gas industry. They do not provide meaningful presentation of operating results or financial position.[23] Therefore, the application of a uniform traditional accounting method does not enhance interindustry comparability of the financial statements.[24]

The conclusions of the Commission are as follows:

1. Traditional methods of accounting for oil and gas producing companies fail to provide timely recognition of oil and gas reserves as an asset or in the earnings reported in the financial statements. This is true because "the cost of exploring for and developing oil and gas reserves has no necessary relationship to the value of the reserves."[25]

2. The goal of financial statements is to communicate information to help investors allocate capital in an optimal manner.[26] In the oil and gas industry most of the useful information is obtained through the analysis of the supplemental disclosures required, not from the primary statements.[27]

3. To fulfill the goal of financial statements for the oil and gas industry, it will be necessary to adopt a new method of accounting that recognizes:

(1) Proved oil and gas reserves as assets in the balance sheet;
(2) Additions to proved reserves and changes in the valuations of proved reserves in the income statement; and
(3) All costs associated with finding and developing additions to proved oil and gas reserves, together with all costs determined to be nonproductive during the current period, in the income statement.[28]

4. Because of the complications of changing from full cost to successful efforts costing and the impending implementation of reserve recognition accounting, oil and gas producing companies will not, at this time, be required to follow any specific method of accounting.[29]

[22]Ibid., p. 40694.
[23]Ibid., p. 40691.
[24]Ibid., p. 40694.
[25]Ibid., p. 40692.
[26]Ibid., p. 40694.
[27]Ibid., p. 40695.
[28]Ibid., p. 40688.
[29]Ibid., and FASB Statement 25.

The Application of Reserve Recognition Accounting

In an attempt to provide a reliable data base for government policies and to provide useful earning potential information for financial statements, the SEC has developed reserve recognition accounting (RRA). This is a new method of accounting using a current value approach for disclosing the values of "proved oil and gas reserves." The SEC defines proved reserves as "the estimated quantities of crude oil, natural gas, and natural gas liquids which geological and engineering data demonstrate with reasonable certainty to be recoverable in future years from known reservoirs under existing economic and operating conditions."[30] These estimates must be substantiated by drilling and proven to be commercially recoverable under existing conditions.

The heart of RRA is the recognition of earnings at the time that the reserves are determined to be proven. The value of these proven reserves is then recorded as assets and the changes in the value of the proven reserves are considered to be income. With this method, the financial statements show the results of current exploration and development activities by associating additions to proven reserves with the related costs. Under RRA essentially all exploration and development costs are charged to expense as they are incurred. All changes in values of the proven reserves are recorded as a revenue and, therefore, result in a better matching of revenues and expenses.[31]

The SEC prescribed a method by which companies are to place a monetary value on proven reserves. It is conceded by the SEC that the method may not provide the best estimate of a company's future earnings. This method will provide a relatively objective and uniform approach for pricing and discounting future net revenue streams from estimated production of proven reserves. The SEC prescribes that a dollar valuation of proven oil and gas reserves is developed as follows:

(1) Estimates are made of quantities of proven reserves and the future periods during which they are expected to be produced based on year-end economic conditions;
(2) The estimated future production of proven reserves is priced on the basis of year-end prices except that future prices of gas are increased for fixed and determinable escalation provisions in contracts;
(3) The resulting future gross revenue streams are reduced by estimated future costs to develop and to produce the proven reserves, based on year-end cost estimates;
(4) The resulting future net revenue streams are reduced to present value amounts by applying a 10 percent discount factor.[32]

Reserve recognition accounting is still in the development stage. The SEC is not at present requiring full implementation of RRA. It is, however, requiring that oil and gas producing companies file a supplemental earnings summary based on RRA for the year ending after December 25, 1980.[33]

[30]Accounting Series Release No. 253, p. 40706.
[31]Adkerson, p. 78.
[32]McMoRan Oil & Gas Company, *Annual Report*, 1979.
[33]Securities and Exchange Commission, Release No. 33-6080.

The information required in the supplemental earnings summary can be divided into three fundamental groups: production activities, current exploration and development activities, and revisions to previous additions to proven properties.[34]

1. The production activities section is primarily a statement of cash flows for the period. This section is composed of revenues from the sale or transfer of oil and gas set against the costs of production to result in "income from producing activities."[35]

2. The current exploration and development activities section is the heart of the entire RRA project. This section has two parts. The first is the "current additions to proven properties." This value is the discounted value of future net revenues from new proven oil and gas reserves. The second part is the "costs of additions to proven properties." Essentially, as stated earlier, all exploration and development costs are expensed in the period of occurrence; therefore, the current additions to proven properties will result in the net present value of the future net revenue from the new reserves.

3. The revisions to previous additions to proven properties section attempts to distinguish increases in reserve valuation resulting from successful exploration and the changes in value resulting from revisions of prior years' earnings summaries.

The Securities and Exchange Commission has suggested a form for the presentation of the supplemental earnings summary based on reserve recognition accounting. This form is presented as Figure 1.

Figure 1

SUPPLEMENTAL EARNINGS SUMMARY OF OIL AND GAS PRODUCING ACTIVITIES
YEAR ENDING DECEMBER 31, 19XX

A.	Revenue from oil and gas:		
	Sales to outsiders	$XXXX	
	Transfers	XXXX	$XXXX
	Costs of production:		
	Lifting costs	XXXX	
	Amortization of proven properties	XXXX	(XXXX)
	Income from producing activities		$XXXX
B.	Current additions to proven properties		$XXXX
	Costs of additions to proven properties:		
	Exploration costs	$XXXX	
	Development costs	XXXX	(XXXX)
	Income from current exploration and development activities		$XXXX
C.	Revisions to previous additions to proven properties:		
	Changes in estimated quantities of proved reserves		$XXXX
	Changes in rate of production		XXXX
	Changes to reflect current prices and costs		XXXX
	Holding gains from passage of time		XXXX
	Total revisions		
	Profit contribution from oil and gas producing activities before income taxes		$XXXX
	Provision for income taxes		XXXX
	Profit contribution from oil and gas producing activities after income taxes		$XXXX

Source: Richard C. Adkerson, "Can Reserve Recognition Accounting Work?" *The Journal of Accountancy*, XXII (September 1979): 72.

The Effects of Reserve Recognition Accounting on the Financial Statements of McMoRan Oil & Gas Company

McMoRan Oil & Gas Company of Metairie, Louisiana (a suburb of New Orleans), was the first company to publish the supplemental earnings summary of oil and gas producing activities in its annual report as proposed by the Securities and Exchange Commission. In its 1979 annual report, McMoRan included comparative summary of operation statements prepared on the basis of generally accepted accounting principles (GAAP) for the five-year period of 1975 through 1979. It also included comparative summary of operation statements prepared on the basis of reserve recognition accounting (RRA) for the four-year period of 1976 through 1979. This dual presentation of the summaries of operations using their respective bases allows analysis of the informational differences between the two methods of accounting. Each set of statements covers the same events of the company since June 30, 1975. The only difference between the two sets of statements is the basis on which the statements are derived.

The fundamental difference between the two methods of accounting is a matter of timing—when revenues and expenses are recognized. The revenues and expenses recognized under each method are presented in Table 1. In addition, the percentage difference between the two methods, using the GAAP figures as base, is presented for revenues, expenses, net income, and earnings per share. The percentage difference analyses brought to light some rather startling differences. One such difference was that the net income recognized for 1979 under RRA was over 2,400 percent greater than the net income recognized using GAAP for the same period.

Another important phase of analysis deals with the detection of trends in financial data. Table 2 was compiled using comparative financial statements converted to percentages of their respective base year information. In both sets of data, 1976 was used as the base year. This allows comparability between the two methods of accounting and the trends they present.

The trends presented by the two sets of financial statements are completely diverse. If the earnings per share (EPS) figures are used as a basis of comparison, the information collected using GAAP shows a company in a continuing, steepening downward trend. The trend pre-

[34]Kerry Cooper, Steven M. Flory, Steven D. Grossman, and John C. Groth, "Reserve Recognition Accounting: A Proposed Disclosure Framework," *The Journal of Accountancy* XXII (September 1979): 87.

[35]Ibid.

Table 1

COMPARISON OF INCOME RECOGNIZED UNDER GAAP AND RRA FOR McMoRan OIL & GAS COMPANY

	1979			1978			1977			1976		
	GAAP[2]	RRA[3]	Percent[4]	GAAP	RRA	Percent	GAAP	RRA	Percent	GAAP	RRA	Percent
Revenue[1]	19,445	85,435	439	16,097	36,665	228	11,379	6,444	57	10,012	23,974	239
Expense[1]	18,433	60,731	329	13,619	30,617	244	9,427	11,284	119	7,999	20,111	251
Net Income	1,011	24,704	2,443	2,478	6,048	244	1,952	(4,840)	247	2,013	3,863	191
Earnings per Share:												
Primary	0.16	3.99	2,493	0.41	1.01	246	0.43	(1.12)	(260)	0.47	0.90	191
Fully Diluted	0.16	3.91	2,443	0.41	1.01	246	0.43	(1.12)	(260)	0.46	0.88	191

[1]In thousands of dollars.
[2]Generally Accepted Accounting Principle.
[3]Reserve Recognition Accounting.
[4]Percentage difference between the two methods of accounting using GAAP as the base.

Table 2

A COMPARISON OF THE TRENDS IN THE FINANCIAL INFORMATION PRESENTED USING GAAP AS OPPOSED TO RRA 1976-1979

	GAAP				RRA			
	1976	1977	1978	1979	1976	1977	1978	1979
Revenues	100	113	160	194	100	26	152	356
Expenses	100	117	170	230	100	56	152	301
Net Income	100	96	123	50	100	-125	156	639
EPS: Primary	100	91	87	34	100	-124	112	443

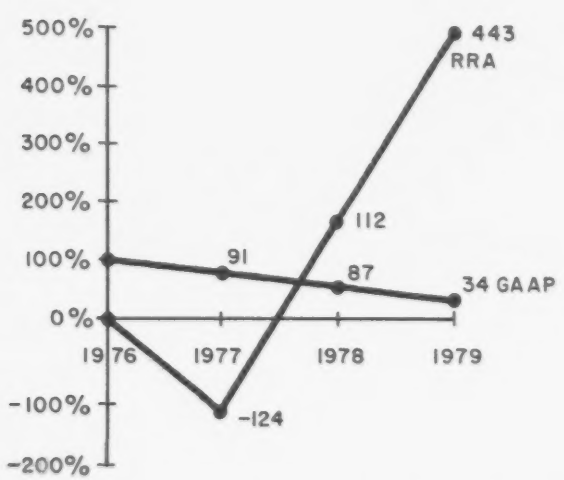
sented in the RRA statements is that of a company that had a bad year in 1977 but has corrected its problem—its future looks very good. Figure 2 illustrates the difference.

An Evaluation of Reserve Recognition Accounting

The historical costs of assets are irrelevant to the value of the assets attained in most oil and gas companies.

Figure 2

TRENDS OF EARNINGS PER SHARE



Steps should be taken to provide additional information for the investing public. Reserve recognition accounting is the method that the Securities and Exchange Commission considers to be the best.

In this decision, the SEC has combined two issues that are not necessarily related. To maintain that the Energy Policy and Conservation Act of 1975 is requiring the use of RRA to obtain a reliable data base is a facade. FASB Statement 19 complies with all the disclosure requirements of EPCA. Establishing a method of collecting and verifying a reliable data base does not necessitate the involvement of the financial reporting system.

The implementation of RRA has a profound effect on the financial statement. One effect is that RRA income differs significantly and erratically from historical income. To justify RRA (or any new method that produces widely erratic results) as an improvement over the traditional accounting method requires a certainty that the fluctuations result from sound methodology applied to a reliable data base. There is not enough information about RRA, at this time, to determine whether or not the fluctuations are the result of pertinent information.[36]

Another area of concern is the reliability of the estimates used to determine the future revenues and expenses for financial statements. It is agreed in the oil

(Continued on page 28)

[36]Joseph E. Connor, "Reserve Recognition Accounting: Fact or Fiction?" *The Journal of Accountancy* XXII (September 1979): 95.

IMPORTANCE OF MENTOR-PROTEGE RELATIONSHIPS TO THE UPWARD MOBILITY OF THE FEMALE EXECUTIVE

*Roy Farris and Linda Ragan**

Introduction

The reign of the business *man* may well be over. In a 1976 study of the labor force, 76.4 percent of all men 16 years and over were in the labor force (55,246,000). This compares with a 46.8 percent rate for women 16 years and over (37,817,000).[1] More recent (although not exactly comparable) statistics indicate that in February 1981 the number of men 20 years of age and older who were actually employed was 52,134,000. This compares with 38,410,000 women 20 years of age and older who were actually employed at the same time.[2] As more and more women enter the workforce, conditions must change to allow them opportunity for advancement. Legislation alone will not force women to the top of the corporate ladder. Nor will hard work and loyalty singularly open doors to the boardroom.

Women's place in the business world continues to be the topic of conversations, discussions, debates, and research studies throughout the United States and internationally as well. Analysts and consultants alike propose theories about and solutions to the problems of succeeding as a woman in the organization. The various theories presented in the literature make one point perfectly clear: There is no single, quick-and-easy solution to the corporate feminine dilemma.

Among the proposals for improving the upward mobility of women in the organization are assertiveness training (as well as other types of training); learning about, as well as how to effectively utilize, the political strategies of the organization (dressing the part, socializing with the right people, knowing what to say in board meetings, and projecting the "right" image); and attending executive workshops designed for the purpose of political grooming.[3] Some theorists blame the male power structure and the female stereotype for women's lack of upward mobility. Many researchers, according to William Wagel, claim that stereotyping is

> . . . a key causal factor in organizational positioning and advancement. Generally, research findings reveal that men are more independent, objective, and competitive. Women, on the other hand, are considered more gentle, sensitive, and passive as well as dependent and subjective. Women are further characterized as lacking competitiveness, leadership ability, and ambition. All these feminine traits, whether real or imagined, are generally considered detrimental to managerial effectiveness.[4]

Undoubtedly, women must contend with all of these elements if they wish to attain top-management positions.

Although all these factors play an important part in the development of executive women, corporate politics and connections may be the most important influences on the ability of women to reach the upper levels of management. The recognition and favor of those upper-level managers who are in positions to boost women's careers may be the stepping-stones necessary for women to reach the executive offices. It is this very special type of corporate connection, that of mentor and protege, that is investigated in this article. First, the characteristics, duration, number, and timing of mentor-protege relationships are considered. Second, the advantages of such relationships to both mentor and protege are examined. Finally, the hazards or dangers of the mentor-protege relationship are explored.

The Mentor-Protege Relationship

Characteristics of a Mentor

In order to understand the mentor-protege relationship, it is first necessary to understand some of the characteristics of a mentor. The functions of a mentor are many. Levinson, in his study of the phases in the adult male life, lists several roles the mentor might fulfill:

> He may act as a *teacher* to enhance the young man's skills and intellectual development. Serving as *sponsor*, he may use his influence to facilitate the young man's entry and advancement. He may be a *host and guide*, welcoming the initiate into a new occupational and social world and acquainting him with its values, customs, resources, and cast of characters. Through his own virtues, achievements, and way of living, the mentor may be an *exemplar* that the protege can admire and seek to emulate. He may provide *counsel* and moral support in time of stress.[5]

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[1]Beverly L. Johnson and Howard Hayghe, "Labor Force Participation of Married Women, March, 1976," *Monthly Labor Review*, June 1977, p. 33.

[2]Current Labor Statistics: Household Data, Table 2, "Employment Status by Age, Sex, and Race, Seasonally Adjusted, February, 1981," *Monthly Labor Review*, May 1981, p. 72.

[3]Corporate Woman, "Teaching Women How to Manage Their Careers," *Business Week*, May 28, 1979, pp. 148, 150, and "Women: "The Onus of Sex Stereotyping," *Personnel*, November-December 1977, p. 43.

[4]"Women: The Onus of Sex Stereotyping," p. 43.

[5]Daniel J. Levinson and others, *The Seasons of a Man's Life* (New York: Knopf, 1978), p. 98.

However, the mentor-protege relationship is neither a parent-child nor a peer relationship. Levinson emphasizes this fact: "The mentor is not a parent or crypto-parent. His primary function is to be a transitional figure."[6] Obviously, these influences of a mentor can have a great impact upon the future of the protege.

The mentor, as a transitional figure, is usually older than the protege. Levinson describes the age difference this way:

> The mentor is ordinarily 8 to 15 years older than the mentee. He is enough older to represent greater wisdom, authority, and paternal qualities, but near enough in age or attitudes to be in some respects a peer or older brother rather than in the image of the wise old man or distant father.[7]

Levinson further explains that this relationship may continue until the protege reaches his middle or late thirties. After that, mentor-protege relationships are given up, since the need for them diminishes.[8]

It is after the protege becomes established in his career and the company that he may become a mentor for a younger member of the company. This process is described by Levinson as follows:

> Mentoring is part of a developmental process that Erikson has called "generativity." Through this process, a man in middle adulthood forms a growing awareness of the continuity of human life and the flow of generations. He feels a concern for the upcoming generation of young adults, who must in time be ready for the responsibilities of middle age.[9]

It is logical that those who at one time were proteges often become mentors to help other young members of the organization grow and learn.

Another characteristic of a mentor has been reported by Gerard Roche. His study of top executives named in the "Who's News" column of the *Wall Street Journal* indicates that, presently, nearly all mentors are male.[10] This is very significant. Women generally have not reached a point in their careers or organizational ranks to be strong mentors for younger organizational members. The mentors in Roche's study tended to be immediate supervisors (48.3 percent) and department or division heads (53.5 percent). However, fully one-third listed the president or chief executive officer as their mentor.[11] (Note: Total exceeds 100 percent because of multiple responses.) Because of the importance of a role model as one of the functions of a mentor, women lose out on this important aspect of a mentor-protege relationship simply due to a lack of precedence.

Intensity of the Relationship

Although the term "mentor" has been used by various authors in a number of ways, most agree that a mentor is a sponsor to someone in the organization who is younger and less knowledgeable about the operations, interrelationships, and politics of the organization. Levinson, one of the early proponents of the necessity of the mentor-protege relationship for the development of young men, has described the association as an intense connection. According to Levinson:

> Mentoring is best understood as a love relationship. It is difficult to terminate in a reasonable manner, for it has some of the same intensity as the feelings between parents and growing children, or between husbands and wives.[12]

His definition is one of the strictest descriptions, in terms of emotional intensity, used in the literature.

Another view of the intensity of such a relationship is presented in an article by Ruth Halcomb. She quotes Virginia Carter, Vice President for Creative Affairs at TAT Communications and Tandem Productions:

> She explained, "A mentor is someone who is older and wiser and already established in the area of your interests. This is a person who opens doors for you and who has such confidence in you that you have confidence in yourself."[13]

This definition encompasses the feeling of the mentor as a friendly teacher and guide, a much less intense relationship than the one described by Levinson. In this article, the term "mentor" is used to describe a strict sponsor-type relationship that includes a great amount of emotional closeness during the mentoring period.

Duration, Number, and Timing of the Relationship

Even though the mentoring relationship is very important, it generally lasts only two or three years, eight to ten at most.[14] This is quite natural, since the role of the mentor is primarily to help the protege become established in the company or career. After a period of time, the protege has obtained a power base and no longer needs someone higher up "pulling for him."

Gerard Roche's study questioned top executives about the number of mentor-protege relationships they had (if any) and the timing of such relationships in their careers. The results are significant.

> Although female executives constitute a very small proportion of the total (less than 1%), all those responding had a mentor. Women tend to have more mentors than men, averaging three sponsors to the men's two.[15]

The study further revealed that the majority of women formed mentor-protege relationships during the sixth to tenth years of their careers, whereas men generally formed them in the first five years of their careers.

Ruth Halcomb observes that the mentor-protege relationship is most needed during periods of crises or change in the protege's career.

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[6]Ibid., p. 99.

[7]Daniel J. Levinson and others, "Periods in the Adult Development of Men: Ages 18 to 45," *The Counseling Psychologist* 6, no.1 (1976): 23.

[8]Ibid., p. 24.

[9]Levinson, *The Seasons of a Man's Life*, p. 254.

[10]Gerard R. Roche, "Much Ado About Mentors," *Harvard Business Review*, January-February 1979, p. 15.

[11]Ibid., p. 20.

[12]Daniel J. Levinson, "Growing Up with the Dream," *Psychology Today*, January 1978, p. 27.

[13]Ruth Halcomb, "Mentors and the Successful Woman," *Across the Board*, February 1980, p. 13.

[14]Levinson, "Growing Up with the Dream," p. 27.

[15]Roche, p. 24.

> In a woman's slow and difficult climb to the upper levels of management, a mentor or very understanding boss may be necessary at not just one, but at two crucial stages. One is during the early phase of a career, when the woman first sees her work as more than just a job and realizes that it may be what she will be doing for the rest of her life, when the mind-set to move on and up is beginning to crystallize. The other stage is later, when it's time for the final push to the top rungs of the ladder.[16]

These periods of change are obvious times when a woman or a man might need the additional support and influence of a mentor. The experience and knowledge the mentor has accumulated may be invaluable to the protege at a critical point in his or her career. The benefit of the mentor's knowledge may help prevent the protege from making mistakes or taking unnecessary risks. It would not be in the best interest of the protege to be protected from all tough situations, since such cases may be excellent vehicles for learning. However, the benefits of a mentor are clear at critical times throughout the career of the protege. Still, the greatest number of mentor relationships occur in the early years of the protege's career.

Benefits of the Mentor-Protege Relationship

Obviously, just the fact that a large number of top-ranking executives at one time had a mentor or sponsor indicates that these relationships are beneficial to some degree. One study of upper management found that "nearly two-thirds of the respondents reported having had a mentor or sponsor, and one-third of them has had two or more mentors."[17] These numbers are significant when one considers that *two-thirds* of the top executives had help reaching their positions in the organization. Mentor-protege relationships would not exist if some importance was not attached to them. Such relationships result in advantages and benefits to both the mentor and to the protege.

Advantages to the Mentor

The mentor is the individual who shares knowledge and uses influence in helping a protege develop and grow. Because of this, the benefits to the mentor are often ignored. However, this individual also gains much by performing a sponsorship role.

In the overall view of the company, mentors are necessary to help insure continuous and stable succession of management personnel. Thus, those companies that actively encourage mentor-protege relationships have knowledge passed willingly from one group of managers to the next; less time and effort is wasted on "reinventing the wheel."[18] Obviously, many operating errors and financial losses can be averted by an explanation of certain practices that have been attempted in the past. An older member of the organization can transmit valuable information, gained by experience, to a younger protege. Managers who have a financial or emotional interest in the company would undoubtedly encourage sponsorship because of this.

Strong leadership is mandatory for future company growth. In addition to possible financial savings to the organization, mentor-protege relationships tend to stress healthy leadership qualities by encouraging total, well-rounded development of the younger members.[19] The young are forced to look outside of their niche in the organization to see the whole picture. The mentor, in this case, may lessen his or her own load by passing knowledge and responsibility to the protege, thereby allowing the sponsor to look into personal growth needs and interests. Zaleznik has suggested that this leadership development aspect is critical.

> Mentors take risks with people. They bet initially on talent they perceive in younger people. Mentors also risk emotional involvement in working closely with their juniors. The risks do not always pay off, but the willingness to take them appears crucial in developing leaders.[20]

By performing this role, mentors are molding individuals who may succeed them in the future.

Financial benefits and stability of leadership are not the only advantages important to mentors. By associating with talented young members of the organization who respect them and seek their advice, mentors can actually place themselves in a position of power. One female executive summed up the advantages to the mentor in this way: "Mentoring is both a proof of the executive woman's power and a means of impressing it upon others."[21]

Benefits to the Protege

In addition to the benefits the mentor receives from the mentor-protege relationship, there are also a number of benefits accruing to the protege. Some benefits to the protege, such as knowledge and access to information and experience, are easily discernible. Other benefits, however, are not so noticeable. According to Gerard Roche:

> Executives who have had a mentor earn more money at a younger age, are better educated, are more likely to follow a career plan, and, in turn, sponsor more proteges than executives who have not had a mentor.
>
> Significantly, although both groups work the same long hours, those who have had a mentor are happier with their career progress and derive somewhat greater pleasure from their work.[22]

The proteges have a map for their future and realize some of the benefits of their positions earlier than those individuals who had no mentor-protege relationship.

Ruth Halcomb has listed other important benefits to the protege:

> In the corporations the protege not only needs to learn more about the job but must also be initiated into the game-playing techniques, such as

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[16]Halcomb, p. 15.

[17]Roche, p. 14.

[18]Eliza G. C. Collins and Patricia Scott, "Everyone Who Makes It Has a Mentor," *Harvard Business Review*, July-August 1978, p. 79.

[19]Ibid., p. 93.

[20]Abraham Zaleznik, "Managers and Leaders: Are They Different?" *Harvard Business Review on Human Relations* (New York: Harper & Row, 1979), p. 176.

[21]Corporate Woman, "Women Finally Get Mentors of Their Own," *Business Week*, Oct. 23, 1978, p. 80.

[22]Roche, p. 15.

> building an image and learning to be an effective team member—things that are especially complicated for women entering the game.[23]

So not only do the individuals with mentors advance more quickly in their career fields, they also are groomed for corporate politics. They undoubtedly show more poise and confidence in situations where an impression of authority must be maintained. This benefit can be very important to the protege.

As a transitional figure, the mentor helps the protege in the latter's career, shortly after the protege leaves the classroom and the world of theory. Often, one must make a tremendous adjustment to the problems of the "real world." Paula L. Gottschalk, Director of Corporate Relations at CBS, has expressed it this way:

> But the most important thing . . . is to explain the difference between the idealized corporate world and the real one and offer pointers on how to operate in the real one.[24]

In other words, the mentor may remove the rose-colored glasses the protege has been wearing. The benefit of realism is necessary for the growth of the protege.

In addition to these benefits, the mentor may also serve as a personal enthusiast for the protege, heralding the protege's qualities to those who can further his or her career. Rosabeth Kanter has described this function as follows:

> First, sponsors are often in a position to *fight* for the person in question, to stand up for him or her in meetings if controversy is raised, to promote that person for promising opportunities. . . .
>
> Second, sponsors often provide the occasion for lower-level organization members to *bypass the hierarchy*: to get inside information to short-circuit cumbersome procedures, or to cut red tape. . . .
>
> Third, sponsors also provide an important signal to other people, a form of "reflected power." Sponsorship indicates to others that the person in question has the backing of an influential person, that the sponsor's resources are somewhere behind the individual.[25]

The mentor is not only a guide and teacher, but a cheering section and fan club who proclaims the virtues of the protege to others in the organization.

Hazards or Dangers of the Mentor-Protege Relationship

Although there are obvious advantages and benefits to the mentor-protege relationship, any affiliation that involves a type of emotional closeness also leaves room for dependencies, disagreements, animosity, and a parting of the ways. The mentor-protege relationship is no exception. These problems can be magnified if the relationship involves a male and a female instead of the typical man-to-man association.

Even though the benefits of the relationship can be tremendous for the individuals involved, both may suffer if the relationship becomes too one-sided. Levinson has written of several possible evils, including the tendency to make a protege into a carbon copy of oneself. This would inhibit the development of the younger member. Levinson warns of the temptation to exploit the protege for the mentor's own gain. Should the mentor feel threatened by the development and success of the protege, a once-constructive relationship might be turned around to destroy the advancement the protege has made. Levinson also warns of too much devotion by the mentor. This would also hinder the growth and independence of the protege.[26]

The male-female or female-male type of mentor-protege relationship can have special problems. As with any type of emotional connection between the sexes, the intensity of the feelings between the two may lead to a romantic or sexual relationship. In this instance, the benefits of mentoring may be clouded or overshadowed by other feelings.

If a woman has a male sponsor, both parties may tend

> . . . to make her less than she really is: to regard her as attractive but not gifted, as a gifted woman whose sexual attractiveness interferes with work and friendship, as an intellectual but impersonal pseudo-male or as a charming little girl who cannot be taken seriously.[27]

This type of sponsorship must be handled differently than female-female or male-male connections. The emotional bonds formed between the two parties must be guarded carefully and danger signals recognized as early as possible. When romantic or sexual overtones occur, for example, the relationship must be evaluated. If a beneficial business relationship is of utmost importance, these other intense and conflicting emotions must be dealt with in a timely manner. On the other hand, a mentor-protege relationship that turns into a romantic or sexual relationship may not necessarily be destructive. Clear communication and honesty about the relationship are key factors in protecting the female-male type of relationship.

A mixed gender association also eliminates the role model function the sponsor may perform. The protege may not learn the intricacies of such things as business dress, expected behavior at certain functions or in specific situations, or other subtleties that could be acquired by observing a member of the same sex.

Along with all the hazards mentioned, the ending of a mentor-protege relationship may be painful. The closeness and emotional ties could cause great animosity should a major disagreement occur. As Levinson indicates:

> There is plenty of room for exploitation, undercutting, envy, smothering, and oppressive control on the part of the mentor, and for greedy demanding, clinging admiration, self-denying gratitude, and arrogant ingratitude on the part of the recipient. It is not always clear who is doing what for whom. After the relationship has been terminated, both parties are susceptible to the most intense feelings of admiration and contempt, appreciation and resentment, grief, rage, bitterness and relief—just as in the wake of any significant love relationship.[28]

The dissolving of a mentor-protege relationship may be somewhat comparable to a child's leaving home to

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[23]Halcomb, p. 15.

[24]Corporate Woman, "Women Finally Get Mentors of their Own," p. 74.

[25]Rosabeth Moss Kanter, *Men and Women of the Corporation* (New York: Basic Books, 1977), pp. 181-82.

[26]Levinson, *The Seasons of a Man's Life*, pp. 253-54.

[27]Ibid., p. 98.

[28]Ibid., p. 334.

begin a life of his or her own. In addition, depending on the emotional intensity of the relationship, the dissolving of a male-female mentor-protege relationship may appear to take on overtones of a divorce. Out of the relationship, it is hoped, will emerge two independent persons, both better prepared to face the world of business and enriched by the relationship. Although the relationship may mean a great deal to both parties, the intensity cannot continue on a prolonged basis if the expected advantages are to be derived.

Summary

There is no single, quick-and-easy solution to the corporate feminine dilemma. The mentor-protege relationship, however, offers a number of advantages and benefits to the upward-bound female executive. Advantages and benefits accrue to both the organization and the individuals as a result of the mentor-protege relationship.

Mentors contribute to their company's financial and leadership stability by their sponsorship role. They also gain by allowing proteges to assume some of their responsibilities. In sponsoring a younger member of the organization, mentors lessen their own load while putting themselves in a position of influence.

Some of the benefits to the protege include access to information and experience, a defined career path, grooming for corporate politics, a guide for the entrance into the real corporate world, and possibly a personal enthusiast.

Not only do the partners in mentor-protege relationships derive benefits from such relationships, but each is also subject to the hazards or dangers that may result from such relationships. Problems may arise because of one-sided relationships or mixed gender associations with the extra emotional conflicts that may occur. Terminating the mentor-protege relationship is another potential problem, since the two parties involved may be at odds due to the ending of the relationship. This emotional rift may cause a great deal of anxiety for both parties.

The mentor-protege relationship is certainly complex. The circumstances and individuals involved will determine the exact nature of the relationship. Characteristics may be similar in mentor-protege relationships, benefits may be the same in most cases, and hazards may be universal. The effect on the parties involved, however, will vary according to their personalities, capabilities, and potentials.

Conclusions

Women must obtain the necessary skills to qualify for positions in upper-level management. In addition, they must have a special helper to guide, teach, and encourage them. Studies have shown the importance of a mentor for career advancement. According to Rosebeth Kanter:

> If sponsors are important for the success of men in organizations, they seem absolutely essential for women. If men function more effectively as leaders when they appear to have influence upward and outward in the organization, women need even more the signs of such influence and the access to real power provided by sponsors.[29]

Women need mentors to increase their corporate political skills and organizational exposure.

Some companies, such as Jewel Tea Company, Inc., actually provide for sponsorship of new members of the organization. Donald S. Perkins, Chairman and Chief Executive Officer, finds the association essential:

> I don't know that anyone has ever succeeded in any business without having some unselfish sponsorship or mentorship, whatever it might have been called. Everyone who succeeds has had a mentor or mentors. We've all been helped.[30]

The role of the mentor is invaluable to both men and women entering the organization.

Women in the corporation should not pursue a mentor, however. The mentor-protege relationship should develop naturally. One boss explained, "An assumption among men is that you'll get a sponsor if you're good at what you do; to look for one is dangerous."[31] To insure that they receive the benefits of a mentor, women must develop their skills, consult older colleagues or bosses when necessary, and, in general, do a good job. By concentrating on learning and self-improvement, they will make their talents and enthusiasm apparent. One day they will find themselves on the way up the ladder and realize that someone on top is pulling for them.

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[29]Kanter, p. 183.

[30]Collins and Scott, p. 100.

[31]Zane Kotker, "Women's Issues: Bosses Recognize Them, Women Resist Them," *Savvy*, November 1980, p. 47.

(Continued from page 23)

industry that the discovery date quantity estimates are often inaccurate by as much as ±50 percent. Errors in estimates, if recorded in the financial statement, can have a material effect on the statement.

Because of these weaknesses and others that may be misleading when applied to financial statements, RRA should not, at this time, be used in the primary financial statements. However, there is a need for supplemental information. One alternative is to require a supplemental summary of operations based on RRA. This view is substantiated by a study of the Chartered Financial Analysts engaged in brokerage and investment banking houses. The conclusions of this study are as follows:

(1) Analysts are more comfortable using successful effort or full costing than they expect to be using reserve recognition accounting in evaluating financial statements of oil and gas producers;
(2) CFA's would like to have data on reserves in evaluating oil and gas producers' operations, however, as a supplementary offering to the financial statements; and
(3) Analysts believe that the ability of oil and gas producers to obtain external capital would be somewhat reduced as compared with full costing or successful effort accounting.[37]

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[37]William E. Pelley, "Financing in the Future for the Oil and Gas Industry," *Oil & Gas Tax Quarterly* XXI (December 1979): 228.

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December 3, 1981

The Peabody Continental Ballroom

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11:00 - 11:45 a.m.	REGISTRATION/RECEPTION Special Demonstration of Computerized State and Local Data Bank
11:45 - 12:30 p.m.	LUNCH
12:30 - 12:40 p.m.	WELCOME *Thomas Carpenter, President, Memphis State University* *M. E. Bond, Dean, The Fogelman College of Business & Economics*
12:40 - 1:00 p.m.	KEYNOTE ADDRESS *Arthur C. Bass, Vice Chairman, Federal Express Corporation*
1:00 - 1:20 p.m.	NATIONAL ECONOMY - 1982 *Donald Ratajczak, Director, Economic Forecasting Project, Georgia State University, Atlanta, Georgia*
1:20 - 1:40 p.m.	FINANCIAL MARKETS - 1982 *F. John Mathis, Vice President, Continental Illinois National Bank and Trust Company, Chicago, Illinois*
1:40 - 2:00 p.m.	MID-SOUTH ECONOMY - 1982 *Paul R. Lowry, Director, Bureau of Business & Economic Research, Memphis State University*
2:00 - 2:15 p.m.	QUESTION AND ANSWER SESSION *Panel--All Speakers*
2:15 - Adjournment	Demonstration of Computerized State and Local Data Bank

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Editor's note: The first five articles in this issue address the problem of declining American productivity. Reddy and Rao, from a management/marketing perspective, and Cao, from a sociocultural perspective, focus on the "Japanese challenge." Taylor considers changes in the American legal environment and tax structure necessary for reindustrialization. Ginter and House maintain that reindustrialization based on microprocessor technology is the key to American economic success. In contrast, Zausmer and Farris see the development of human potential instead of technology as the means to achieve higher productivity in the United States.

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JAPANESE MARKETING: UNDERLYING REASONS FOR ITS SUCCESS

*Allan C. Reddy and C. P. Rao**

The successful challenge of Japanese firms in American and foreign markets is a growing embarrassment for American business firms and government. The balance of trade between the two countries has been increasingly in favor of Japan in the past two decades. Furthermore, the major thrust of Japanese exports to the United States is in machinery (producer goods) and automobiles, whereas U.S. exports to Japan consist mainly of agricultural products and raw materials.

During the period from January to July 1980, Japan exported $17.674 billion worth of goods to the United States; U.S. exports to Japan amounted to $14.195 billion worth of goods. Machine tools and machinery accounted for 52 percent of the total Japanese exports to the United States, and automobiles consisted of 23 percent of the total; taken together, these represent 75 percent of the Japanese exports to the United States.[1]

What factors have led Japan to achieve such success in world markets? How has Japan accomplished this within the short period since its devastating loss in the Second World War? The answers to these questions have equal significance to both rich and poor nations.

The purpose of this article is to examine in broad terms the underlying factors for Japanese marketing success worldwide, with particular reference to American markets.

Traditional Explanations

The traditional explanations, borderlining between biases and half-truths, are unsatisfactory. For example, the following reasons are frequently mentioned: Japan, due to its limited resources, essentially has to depend on imports of foodstuff and raw materials; to make up for the cost, the Japanese have had to be successful in exporting their goods. Second, Japan spends very little on its defense; therefore, the Japanese government has more time and money to concentrate on its industrial development. Third, Japanese firms, in collaboration with their government, practice "dumping" (selling below their cost in foreign markets), thereby destroying present and potential competition. Fourth, the government in Japan is not so strict about implementing antitrust laws. This tendency has helped Japanese firms and trading companies to grow as large as necessary to achieve large-scale economies. Naturally, a part of this benefit is passed on to the buyers through lower prices. Finally, the cost of labor in Japan is low compared to that in the United States and other Western nations; therefore, Japanese goods are less expensive.

Most of these explanations are far from satisfactory. For instance, Japan is not the only country in the world with limited resources. There are many nations that have limited resources but do not have the economic prosperity of Japan today. And although certain Japanese firms have been found to be using "dumping" in American markets, in the long run selling below the cost of production is unprofitable to anyone. Also, the alleged lax nature of the Japanese government in its antimonopoly legislation is not entirely true, because the Japanese government sees that competition among Japanese firms at home and abroad is well-maintained. Finally, the cost of labor in Japan is not low these days, with the ever-increasing standards of living in that country. This is why Japan is relocating labor-intensive industries from the mainland to neighboring Hong Kong, Malaysia, Singapore, and Taiwan.

Thus, it is quite obvious that Japan is not having a free ride over foreign markets, and there is something more than meets the eye in the Japanese marketing successes. Japan has accomplished its success methodologically, using the managerial skills of planning, direction, and control while optimally utilizing the inherent skills and virtues of its homogeneous population. Also, the Japanese have demonstrated their mastery in the use of the "marketing concept," a widely recognized modern management concept. According to the concept, business firms should first find the customer's wants and needs and then satisfy them through the creation of appropriate products and services, and certainly not the other way around.[2] How else can one explain the number one position of Japanese firms in many lines of business, such as machine tools, automobiles, shipbuilding, steel, electronics, cameras, and motorcycles? Japanese firms have outperformed the Swiss in watchmaking; the Germans in cameras; and now the Americans in automobiles and many other products.

The American response to the Japanese challenge at best has been haphazard. Some American firms have discarded unproductive lines and concentrated on fewer product lines; some have diversified into other businesses. None of the American firms has really challenged the aggression. The U.S. government's spasmodic responses have not hampered the Japanese invasion of American markets either. Government reaction has consisted of a

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few abortive efforts to develop a foreign trade policy based on frequent dollar devaluations and import quotas over certain categories of products (autos, for example) where American business is seriously threatened by foreign competition. But, when the dollar is devalued, it becomes easier for Japan to buy raw materials. In addition, Japanese firms always find new ways to cut production costs and thereby still offer their products at lower prices. Their American counterparts, feeling that they are temporarily protected by lower export prices, do not have the same pressure to produce more economically. Conversely, when quotas are set, Japanese producers quickly move into higher-quality and higher-priced product lines (such as luxury models in autos), thus maintaining the established quotas but increasing the dollar value of their exports to the United States.

Ten Reasons for Japanese Success

The following is a list of ten reasons for Japan's marketing strategy success. The list is by no means exhaustive; it is meant to cover only the most important underlying factors that are thought to be the reasons for Japan's economic upsurge.

1. *Emphasis on long-term planning and market-share strategy.* Japanese firms emphasize long-term planning and market share even at the expense of initial losses. For example, in the 1960s, only a few Toyotas and Datsuns were sold when they were first introduced on the U.S. West Coast market. There appeared to be no demand for them against the large and luxurious American automobiles and somewhat established European makes. But Japanese firms, without giving up hope, went on building up their market share in a slow but steady manner. When the gas crunch came in the 1970s, the wheel of fortune turned in the favor of the Japanese automakers. Today, not only are millions of Toyotas and Datsuns sold each year in the American market, but also other Japanese makes, such as Honda, Mazda, and Subaru, have become household names. The Japanese have built up a reputation for quality, service, availability, and low price. Other industries have been challenged by Japanese firms in the same manner.

In contrast, American firms have been concentrating on short-run goals and immediate profits even at the expense of dissatisfied customers. A familiar question in American business circles is, "What is the bottom line?" A major reason for this short-term attitude of American firms is the fact that professional managers in American business, in order to feel secure in their jobs, want to "play it safe" by showing profits to investors each and every quarter. Unfortunately, this philosophy costs American business a great deal. The modern consumer is not convinced by "buy American" slogans but is concerned with the quality, price, service, and other considerations of a product regardless of who makes it.

2. *"Export-push" factors.* The export-push factors are defined by Monroe as "Japanese actions and tactics that have been major catalytic agents in the country's export growth."[3] These factors do not include events or conditions outside of Japan that may have stimulated demand for Japanese products. The major export factors are:

a. Building exports through market-share objective
b. Implementing a marketing strategy based on the "marketing concept"
c. Efficient and careful planning from beginning to end in export promotion
d. Competitive pricing
e. Generous financing terms and conditions
f. Competitive product design or redesign

The keen interest of Japanese firms and trading companies in building up exports has become an extension of ongoing competition within the domestic markets for market share. Japanese companies compete vigorously with one another to gain advantage in foreign markets just as they do for Japanese markets. But once a customer has been won over, there is little or no effort by other Japanese firms to woo the customer away. There tends to be a mutual respect for each other's turf. How do Japanese companies build up market share? First, thorough analyses are made concerning product design, performance, and other characteristics deemed essential for success in a given region or country. After this homework is done and after necessary modifications or additions to existing plants and equipment are made, sales and promotion campaigns begin. A small segment of a market is target-tested first, and once operations have been established there, the distribution network and dealerships are expanded systematically in other locales. All the while, close contact is maintained between company representatives in the foreign country and their colleagues at company headquarters in Japan. In this way, necessary adjustments are made in the products and reports are prepared about proper regulation of the flow of exports in relation to market demand.

Among other factors, the use of pricing and liberal financing terms to dealers and customers have become very important tools. Finally, if Japanese firms perceive a threat to their present or emerging market position, they are likely to respond by updating or redesigning their product line and thereby gaining a step on the challenger (a Japanese or a foreign firm).

3. *"Import-pull" factors.* The import-pull factors play an equally significant role. Import-pull refers to considerations internal to the United States:

a. Changes within the U.S. competitive environment
b. Changes in consumer attitudes
c. Policy decisions or actions by U.S. firms and government
d. Positions taken by U.S. labor that afford foreign producers a better opportunity to gain and hold increased market shares[4]

Actually, the export-push and import-pull factors work in unison. Their combined effect can be compared to the

actions of the blades of a pair of scissors. Which is more important at a point in time can hardly be determined.[5]

The changes within the U.S. competitive environment have come about since World War II, when the American government began Keynesian economic measures to boost "aggregate demand." Maintaining full employment through increased government spending in order to build aggregate demand became a national objective. With more governmental intervention in economy, free enterprise and competitive systems have found more and more regulations curbing the freedom of American firms.

Modern consumers are more knowledgeable about various products that are available in the marketplace. In addition they are confident that somehow they will be able to repay their debts, since the government is trying to maintain a full-employment policy. In short, American consumers are most optimistic about the future and rarely fail to curtail their consumption habits, thus providing a vast market for a variety of goods.

An important import-pull factor is the ever-declining quality of American-made products relative to those from Japan. The poor quality and workmanship can be attributed to changing values in American life. The values of life have changed from hard work to easy life and from saving to spending. Moreover, through frequent and costly strikes, American workers have won many of their demands for higher wages, fringe benefits, and job security from employers without a corresponding increase in productivity.

The short-term-mindedness of American management policies has quickly cut into the long-term survivability of American firms and their ability to compete in national and international markets.

Finally, government policies in the form of inducement to stimulate new investment or modernize existing production patterns either have tended to be slow in coming or have not come at all in certain major industries. On the contrary, the government has provided a growing number of welfare programs to meet certain socioeconomic objectives and also to buttress aggregate demand. This type of action and inaction by government has constituted conducive factors for import-pull.

4. *The role of Japanese government.* The Japanese government is single-minded in its efforts to make Japanese firms competitively strong. It provides the necessary infrastructure and a favorable climate for growth—internal and international; it discourages imports (the formidable multilayered Japanese distribution system is another barrier for imports); it helps to quickly resolve conflicts between firms, and between management and union; and it finances through direct and indirect methods wherever appropriate. In a nutshell, for over two decades since World War II, the Japanese government has been pursuing economic growth with a passion that American government has reserved for fighting communism. Japan has invested a higher proportion of its GNP and intellectual effort in basic internal development than has the United States. The Japanese government's cooperation with Japanese business firms can hardly be compared with the U.S. government's attitude toward American business firms.

5. *Efficiency bureaucracy.* A corollary factor for the role of Japanese government is the efficiency of bureaucracy in Japan. This may sound a little odd to the Western reader, to whom bureaucracy generally has a negative connotation such as red tape, delays in execution of policies and projects, and so forth. In Japan, bureaucrats are carefully selected and well-trained for their positions so that they stay there for a longer period. These bureaucrats become dedicated to the purpose of building the nation. As if to help achieve this objective, political leaders have considerable continuity in Japan, unlike in many countries, and they rarely interfere with the main trends of governmental policies. On the other hand, with each Presidential change in the United States, there are considerable policy and leadership changes. The patronizing attitude of Japanese bureaucracy in supporting Japanese business firms is exemplified by the function of the Ministry of International Trade and Industry (MITI). In fact, MITI officials are so patronizing and persistent in their efforts on behalf of Japanese industry, they are called *Koiku Mama*—overanxious mothers who hover around their children, pushing them to work hard and study well. MITI takes bold steps in restructuring Japanese industry so as to place it in areas where Japan will have an upper hand.

6. *Cooperative labor unions.* Labor unions began in Japan only since the American occupation of Japan after World War II. Although Japan has its share of costly labor strikes, the important point is the harmonious relationship between management and union. Generally, workers develop a high sense of identity with their firms, partly due to modest differences between managers and workers—workers have no rich capitalist class above them whose lifestyle is essentially different from theirs. The cooperativeness of unions is best seen in their unquestioned acceptance of modern innovations that may in fact threaten labor employment. Japanese workers believe in innovation that helps their firm to make profits. Since many Japanese firms have profit-sharing methods, workers get their part of the benefit.

7. *Research and development thrust.* The Japanese are known as the world's best copiers of others' inventions. Most of the present technology in Japan is borrowed from the United States or Europe. In a way, Japan gets more for its research dollar because others have already borne the major burden of developing an invention.

Japan is turning more to basic and innovative research, contrary to its past practice of concentrating only on adaptive research. Furthermore, it is spending more effort in areas with high potential economic payoff. Japan now has as many people engaged in nonmilitary research as does the United States.[6] The American government, on the other hand, spends a high proportion of R&D dollars on military, space, or basic research.

8. *Unique management style.* Besides an emphasis on formal management development programs,[7] two

noteworthy features of the Japanese management style are its risk-taking attitude and its reward structures. Unlike in the United States, risk taking is a collective process in Japanese firms. In American firms, failure in job performance can mean loss of job, but under the Japanese management style, even an incompetent employee tags along because of the job permanency feature in the system.

The reward system is also different in Japan. Rewards are paid to groups and not to individuals, thereby assuring wider worker participation and support for management. More than 50 percent of wages are paid through period bonuses.

Another unique feature of Japanese management style is the "ringi" system of decision making.[8] Everyone from the bottom up participates in decision making, with programs initiated at the bottom level. Once top management approves a plan, it goes back to the bottom-level employees for implementation.

9. *Exports are a survival strategy.* The extremely unfavorable geographical and topographical features of Japan make it hard for the country to survive without exports. Japan is about the size of the state of Montana but with half the size of the U.S. population. Three-fourths of the population live around its major cities, causing extreme crowding and associated problems. Only one-sixth of the land is arable. With its highly productive methods of farming, Japan can produce only one-third of its food requirements.

Japan is also devoid of any worthwhile minerals. Furthermore, the country is prone to frequent and severe earthquakes. These formidable conditions have not left much choice to Japanese people but to raise themselves above hardships by becoming practical, innovative, frugal, and hardworking. Since the country has to pay for the much needed food and raw materials, the nation developed from early times expertise in manufacturing finished goods and exporting them. The export-consciousness of the Japanese people is visible even in their consumption behavior—they export premium-quality goods abroad and consume relatively inferior quality goods in their home market. In comparison, most of the high-quality American products are sold in American markets, while the inferior-quality, "no frills" products are exported to other nations.[9]

10. *Japanese character.* A nation's strength greatly depends on its people. The Japanese are a homogeneous population. They speak one language and share many customs and traditions as one culture. They have two major religions, Shintoism and Buddhism. The high respect of Japanese for their elders and superiors and their "samurai-like" dedication to work are exemplary. Most important of all is their undivided loyalty to the country. An excerpt from a government communication to the people, for example, reads:

> loyalty to the State requires citizens to show love for it in the right way. Indifference to the existence of one's own nation, and disregard for its values, amount to hatred of one's own nation.[10]

Other notable characteristics of the Japanese are patience, persistence, hard work, and a saving nature. All of these have been particularly useful in building modern Japan.

As one author explains the extraordinary accomplishment of Japan:

> The Japanese as a nation are simply determined to be outstanding in the world and have chosen to achieve this position by economic development. After the Pacific War, the military lost face and the businessman carries the flag.[11]

Conclusion

The complexities of the present international environment compounded by the conflicting interests at home make it difficult for the United States to quickly alter its course and establish protective measures against foreign competition. Nevertheless, it is imperative that the United States progress toward making necessary policy changes immediately to allow time for such changes to bear fruit. The basic purpose of this article, therefore, has been to highlight the underlying factors for Japanese success in American markets. It is hoped that by analyzing the strengths of the competition, one can see the obvious weaknesses within the American economic system. An important moral that one can draw from Japan is the determination of its citizens to uplift their nation from thorn bed to prosperity. This is a lesson both rich and poor nations ought to learn. If there is better understanding among government, unions, consumers, and other vested groups in this country, a new American dream far exceeding the Japanese miracle might just be possible.

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[1]"Japan-U.S. Trade Expanding During 1980," *Japan and the Southeast*, September 1980, p. 4.

[2]Philip Kotler, *Marketing Management: Analysis, Planning, and Control* (Englewood Cliffs, N.J.: Prentice-Hall, 1980), p. 31.

[3]Wilbur F. Monroe, *Japanese Exports to the U.S.: Analysis of "Import-Pull" and "Export-Push" Factors* (Washington, D.C.: U.S.-Japan Trade Council, 1978), p. 192.

[4]Ibid.

[5]Ibid., p. 206.

[6]Ezra F. Vogel, *Japan as No. 1: Lessons for America* (Cambridge, Mass.: Harvard University Press, 1979), p. 136.

[7]Michael Y. Yoshino, *Japan's Managerial System: Tradition and Innovation* (Cambridge, Mass.: MIT Press, 1968), p. 243.

[8]Michael Y. Yoshino, *Japan's Multinational Enterprises* (Cambridge, Mass.: Harvard University Press, 1976), pp. 165-66.

[9]Ferdinand F. Mauser, "The Marketing Fraternity's Short Fall," *Journal of Marketing* 44, no. 4 (Fall 1980):97.

[10]Peter B. Stone, *Japan Surges Ahead* (New York: Praeger, 1969), p. 189.

[11]Ibid., p. 188.

THE JAPANESE CHALLENGE IN THE 1980s: A SOCIOCULTURAL INTERPRETATION

*A. D. Cao**

The strong Japanese presence in international trade in the 1970s told the world that Japan must have something the other industrialized countries do not have. Many explanations have been explored in terms of trade barriers, productivity, research and development, and investments in new technology, but very little research has touched on the grass-root determinant of business excellence: the human element and its sociocultural determinants of performance. It is significant to focus on this crucial element in order to improve American business performance at home and abroad and to cope with the Japanese challenge during the 1980s.

The Japanese challenge is discussed in the first section of this article. In the second section the Japanese sociocultural determinants of performance are explored. Finally, in the third section, some major implications are drawn for U.S. business firms as to how they can try to improve their performance within the firm as well as learn how to market their products better in Japan and in other countries with similar sociocultural traits.

The Japanese Challenge

The Japanse challenge is most obvious in the automobile area. While the Japanese output of cars and trucks grew by 14.4 percent between 1979 and 1980, the American output plunged by 30 percent during the same period.[1] Japan became the world's largest automobile producer in 1980 mainly because of the country's strong penetration of world markets. Japan's automobile exports rose by more than 30 percent in 1980, accounting for well over half of the country's total production. In the United States, imports of Japanese cars rose by more than 12 percent in 1980 and sales of Japanese-made cars accounted for 21.2 percent of all U.S. new car sales during the same year. This is an increase of 16.4 percent from 1979. Finally, Japanese cars accounted for nearly 80 percent of all car imports in the United States in 1980.[2]

It is remarkable to note that the Japanese automobile producers could excel during this period of world economic recession, rising oil price, and decreasing demand for automobiles. This could be explained by a blend of ingredients such as solid engineering, reliability, durability, fuel efficiency, and price competitiveness. One basic question that needs to be answered, however, is what grass-root element accounts for such superiority in Japan? The answer must lie somewhere in the higher and rising productivity of Japanese labor and management.

The Japanese challenge can also be seen in other industrial fields. In 1980, Japan topped the United States in crude steel production, while it has surpassed this country in finished steel output since 1974. While the U.S. steel output dropped by 17.8 percent between 1979 and 1980, the Japanese steel output dropped by only 0.3 percent.[3] The Japanese steel threat has caused consternation among U.S. steel producers, leading to multiple lawsuits and the famous trigger price mechanism.

Hoping to duplicate its success in the automobile and steel industries, Japan is now battling Xerox Corporation for U.S. sales of copy machines, once Xerox's undisputed turf. In offices across the United States, the story is much the same: Japanese copy machines make clearer reproductions at half the cost.[4]

The Japanese challenge described for these three industrial fields could be illustrated for many others, including television, footwear, chemicals, aerospace, textiles, and computers. Invariably, such Japanese success has been perceived by the United States as due to higher capital investment and automation. This might be the case, but capital is only part of the reason. The other part must be in the unique Japanese features of the human element needed in any production process, examined in the following section.

Japanese Sociocultural Determinants of Performance

What Japan has that other industrialized countries do not have is people who have been brought up in a sociocultural environment where relationships between family members are based on role expectation and compliance. Such relationships are transferred to the business firms; the family sociocultural traits are integrated in the corporate culture, helping to promote high performance.

The Family Cultural Forces

With family as the core of Japanese society, the "self" interest that predominates in the United States is not as important as the family interest. Whatever a family member does, the family interest always comes first. For example, marriage arranged by the family still takes place in modern Japan, and the Japanese divorce rate is lower than in many other industrialized countries because of concern about family reputation.

Role expectation and compliance in Japan are influenced by the Confucianist philosophy, which deemphasizes the self as an end but emphasizes instead the obligations one has as a member of the family, community, and

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nation. The relationships between family members are based on five basic Confucianist rules of behavior: loyalty, gratitude, respect, sincerity, and trust.

A family member is expected to be loyal to other family members. Loyalty dictates that one must be ready to sacrifice one's self-interest for the interest of another family member. For this reason it is customary to find the oldest son of a family taking care of the younger sisters and brothers until they become independent, although such care may be very cumbersome financially to his own family for a very long period of time. Another illustration of loyalty and sacrifice is the case of a young Japanese widow who refuses to remarry because she wants to stay loyal to her late husband and to her children. Sacrificing oneself for a cause seems to be the meaning of life itself. Such an attitude appears difficult for some Western observers to understand.

Gratitude is very important to the Japanese. In the above case of a brother who takes care of his sister, for example, when the latter becomes self-sufficient and independent, she will always try in one way or another to pay back her brother's family members. The gratitude linkage tends to perpetuate itself from generation to generation. Gratitude is most important for the children vis-a-vis their parents. Repayment of the love and care received from the parents is viewed as a never-ending duty called *on-gaeshi*.[5] This is one reason why many children will agree to a family-arranged marriage.

Respect for the elderly and for the wisdom of older persons dictates obedience from the younger ones and gives authority to the older ones. For this reason, children never contradict the will of their parents or older brothers or sisters. Respect is reflected in the way children address their parents, calling their fathers *o-to-sama* ("honorable father") and their mothers *o-ka-san* ("honorable mother"). Older brothers are called *o-nei-san* ("honorable elder brother") and older sisters are called *o-nei-sama* ("honorable elder sister"). Finally, greeting others with bows is another reflection of the importance of respect in the Japanese culture.

Sincerity and trust are the last two Confucianist rules of behavior that promote close relationships between family members. One is even ready to commit suicide (*hara-kiri*) if one loses the trust of another or is blamed for being insincere. The act of committing suicide is not viewed as an admission of shame or an attempt to hide from such shame or to repent, but is understood as proof of sincerity and willingness to even sacrifice one's own life in order to regain trust.

These basic Confucianist rules of behavior are reinforced by the Japanese role hierarchy, which consists of the roles of the leader, the subordinate, the father, the mother, and the children. Based on this role hierarchy, it is possible to explain how the family culture is transferred to the business firm in order to form the corporate culture. The discussion in the following section focuses on the roles most relevant to business management, which are the role of leader and the role of the subordinates.

The Corporate Cultural Ingredients of Excellence

The five basic Confucianist rules of behavior found in the Japanese family are transfused into the business firm, dictating how the relationship between management and labor must be as it is reinforced by the Confucianist role hierarchy of the leader and subordinates.

Mutual loyalty between the firm and the employees is the most striking characteristic in Japan not found in the United States. Lifetime employment based on such loyalty is the way of life in Japan, while in the United States job mobility from one firm to another is a popular practice. As Mr. Morita, Chairman of the Board of Sony Corporation, has pointed out, when Sony recruits a fresh university graduate, no one can predict where his interests and talents will take him in 10 years, let alone 40 years. Yet when the corporation hires a new graduate, it essentially signs a lifetime employment contract with him. This attitude toward employees, Morita insists, is perhaps the biggest difference between Japanese and U.S. management. In the United States, he notes, "you write a job specification for every position, and if a person does not fit the specification, you get rid of him and hire another one."[6]

It is difficult for U.S. management to understand lifetime employment, because employees in the U.S. firm are perceived as "expenses," while in Japan they are viewed as "investments." For this reason, instead of being laid off, employees are constantly retrained to match the modernization trend of the Japanese firm. Lifetime employment is perhaps the reason for the Japanese lower unemployment rate of 3.1 percent in 1979 as compared to 5.8 percent in the United States, as shown in Table 1.

Table 1
COMPARATIVE ECONOMIC PERFORMANCE

Selected Indicators	United States			Japan		
	1970	1975	1979	1970	1975	1979
GNP Growth Rate[1] (%)	-0.3	-1.3	2.3	11.8	1.4	5.9
Unemployment Rate (%)	4.9	8.5	5.8	1.2	1.9	2.1
Output per Man-Hour[2]	105.0	118.8	129.2	146.5	174.6	230.5
Hourly Compensation[3]	122.3	181.1	250.8	164.0	407.4	533.5
Manufactured Good Price[2]	110.2	171.1	231.9	106.4	159.0	166.1
Gross Fixed Capital Formation to GNP Ratio (%)	17.3	16.3	17.9	35.4	32.2	31.6
Savings to Disposable Personal Income Ratio (%)	7.4	7.7	4.5	18.1	22.5	20.1
Balance of Merchandise Trade (billion $/f.o.b.)	2.5	11.0	-24.7	4.0	5.0	1.8

[1]At constant 1972 prices.
[2]1967 = 100.
[3]In national currencies with 1967 = 100.
Source: *International Economic Indicators*, U.S. Department of Commerce, December 1980.

Lifetime employment based on loyalty does not encourage complacence or lack of performance in Japan. As a matter of fact, the gratitude rule dictates that employees have the obligation to repay the firm for the security and care the firm provides. With lifetime employment, the firm becomes the second lifetime family, with employees trying their best to excel, knowing that the success of the firm means their own success and security. For this

reason, the index of output per man-hour in 1979 was 230.5 in Japan as compared to 129.2 in the United States, and the workers did in fact reap the benefit of their commitment and dedication, since their hourly compensation index rose from 164.0 to 533.5 between 1970 and 1979 as compared to a rise from 122.3 to 250.8 in the United States during the same period (see Table 1).

Lifetime employment is also a reflection of the Japanese philosophy on time horizon, which is integrated in the corporate culture. Although Japanese management does care about short-run results, as is the case in the United States,[7] it is willing to compromise for long-run excellence. In brief, the Japanese believe in doing now for the future.[8] This attitude helps to explain why savings in Japan come close to 20 percent of disposable income for individuals as compared to a mere 4 percent in the United States. For the firm, the Japanese ratio of gross fixed capital formation to GNP was 31.6 percent in 1979 as compared to the U.S. ratio only 17.9 percent, as shown in Table 1.

Mutual respect, sincerity, and trust between management and workers help to promote harmony and cooperation in Japan instead of the adversary relationship found in the United States between the firm and the labor unions. Futhermore, the relationship between the Japanese firm and the Japanese government is more harmonious than the U.S. business-government relationship. There is a cultural reluctance to enter litigation in Japan. Thus in all of Japan there are approximately 12,000 lawyers, compared to 30,000 in Washington, D.C., alone and 600,000 in the United States.[9]

Lessons to Be Learned

Corporate Culture Development

Auto companies in the United States ran more than $4 billion in the red during 1980, because sales of American-made automobiles were the worst in 19 years, and there is no sign yet of an improvement. Since Japanese-made products are excelling, it is about time that U.S. management took a closer look at the human ingredient of the firm in addition to the plant and equipment. This applies not only to the auto industry but to all other industries as well. Otherwise, sooner or later plants in many industries might have to be closed and thousands of workers might have to be laid off. As a matter of fact, in February 1981, U.S. auto makers planned to close another 8 plants, for a total of 16 closed U.S. vehicle-making operations, resulting in more than 52,000 hourly employees being laid off.[10]

Firms in the United States can try to catch up with Japanese firms by speeding up their capital investments, but if the employees' basic beliefs about their role in the modernized company are not modified so that new plants and equipment and new plans become an integral part of the underlying corporate culture, new plans and additional capital investments are doomed to fail. Management in the United States needs to consider the workers as *investment* and *not expense* so that revitalization and recycling of workers become an integral part of the modernization plan. New plans and strategies can only be implemented with the wholehearted effort and belief of everyone involved, and for this fundamental reason, corporate culture needs to be developed.

The development of corporate culture implies the development of values such as *loyalty, gratitude, respect, sincerity,* and *trust* which set a pattern for a company's activities, opinions, and actions. That pattern is instilled in employees by management's examples and passed down to succeeding layers and generations of workers. The chief executive officer's words alone do not produce corporate culture; rather his actions and those of his managers do.

Because corporate culture is so pervasive, changing it becomes one of the most difficult tasks to undertake. Japanese firms, however, have proven that it is not impossible. Even in the United States, the five basic Confucianist rules of behavior have been consciously or unconsciously applied with success in some leading corporations. "The Penney Idea" has brought tremendous loyalty from the employees of one leading retailing firm, J.C. Penney. It is not surprising that Penney's average executive tenure is 33 years.[11] Such loyalty is also found at IBM. Stress on long-term employment based on loyalty results in a long-term financial goal instead of short-term profit and inspires the commitment and dedication needed for high productivity.

U.S. Exports Development

With a trade deficit of $24.7 billion in 1979, as shown in Table 1, U.S. firms should try to understand better the characteristics of their export market, such as the $3 billion Japanese market and others with similar sociocultural traits.

Export development involves much more than just marketing. Marketing can help the initial contact and probably the first deal, but in the long run, sociocultural values become more important in helping to establish long-lasting business relations based on sincerity, trust, respect, gratitude, and loyalty. Many U.S. businessmen have complained about the inpenetrable Japanese distribution system and often have called it a "non-tariff barrier" without trying to understand that the Japanese distribution network is based on strong loyalty ties between the participants of the distribution channel. Exporters in the United States need to learn those sociocultural values and practice them in order to penetrate the Japanese market with more success.

Conclusion

It appears that loyalty, gratitude, respect, sincerity, and trust, which constitute the basic sociocultural rules of behavior found in the Japanese family, also constitute the foundation of the corporate culture in Japan, helping Japanese firms achieve high productivity and prominence in world trade during the last decade.

(Continued on page 14)

THE LEGAL ENVIRONMENT FOR THE REINDUSTRIALIZATION OF AMERICA

*Herman E. Taylor**

Our grand business is not to see what lies dimly in the distance, but to do what lies clearly at hand.

Thomas Carlyle

Escalating taxes, interest, wages, and costs of governmental regulation have pushed American-made consumer goods to a noncompetitive price plateau as quality has declined. Consumers choose the foreign brands and turn away from those marked "Made in the U.S.A."

Interest rates of 20 percent or more, like a rotary lift beneath the wage-price spiral, are driving the farmer from his land, placing the price of a home beyond the family means, depressing the market for equity securities, forcing businesses and individuals into bankruptcy, creating unemployment and resultant crime, delaying acquisition of more efficient industrial equipment, compounding public and private debt, pushing financial institutions toward insolvency, and pricing American goods above what consumers are willing to pay.

Clearly needed is a new legal environment which will provide incentives for America's reindustrialization.

What Are the Objectives of Reindustrialization?

Recapture and expansion of markets, foreign and domestic, for American-made products are the primary goals of reindustrialization.

Attainment of such goals will require a legal environment which will provide incentives for better-quality and lower-priced American-made goods which consumers will choose to buy. In such legal environment, the problems of inflation, interest escalation, idle capacity, unemployment, trade imbalances, and revitalization of the industrial base for economic security and national defense would be alleviated if not eliminated.

How Can the Quality of Goods Be Improved?

Labour, therefore, is the real measure of the exchangeable value of all commodities.

Adam Smith in "An Inquiry into the Wealth of Nations"

"Labour" comprehends the genius, skill, and effort of all who add value to commodities which consumers will choose to buy. Workers in government, in management, and on the assembly line must be included.

"Exchangeable value" implies such quality and price as will cause the consumers to choose to buy that which producers can profit by making.

Thus incentives for both makers and consumers must be provided, which will improve the quality while driving prices down.

What incentives can motivate such disparate groups to achieve a common goal?

"Profits to be shared" provides the pervasive answer. A "National Employee and Consumer Incentive Plan," profit sharing or performance based, can create incentives for improving the quality and lowering prices of American goods and services. A national incentive plan which reaches the pocketbooks of both employees and consumers could provide a profit motive for the entire population to produce, sell, buy, consume, and use American-made products—if the quality and price are right.

Although not all Americans are workers, or profit makers, all Americans are consumers. The plan can be designed to provide incentives for consumers as well as workers.

Consider the worker first. If a portion of every wage increase were based upon the annual growth, exclusive of inflation, of the production and sale of American goods as a percentage of the gross national product, and if to that were added a further portion based upon the company or employer profits for the previous year, an incentive for quality and quantity of production and the sale, purchase, consumption, and use of American goods would extend to every wage earner in the labor force.

For employees, an annual income tax exclusion, equaling the amount of that year's wage increase, would supercharge employee desire for profits from the plan.

Consumers could be given a motivation to buy, consume, and use American-made products by a tax exemption, deduction, or credit based upon their purchases of such goods. This would to some extent diminish any price advantage of the foreign product.

A national incentive plan, for the best results, must include every employee and consumer in the land so as to assure that the entire population will have a stake in the profit-sharing game.

Wage incentives based upon the performance of the nation in making, selling, buying, consuming, and using

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American-made products would be likely to inspire a legal environment of laws and government regulations conducive to profit making. Innovative management, better engineering and design, quality control, worker efficiency, and consumer preference would gain a profit motive. Better quality of goods, lower prices, greater consumption, increased productivity, new products, more employment, higher rates of pay, expanding tax collections, more equity capitalization, less borrowing, and lower interest rates would synergize the goals of reindustrialization.

Without such an incentive plan, escalating wages, indexed to inflation rates, fail to provide incentives for quality and quantity of production and generate higher prices and shrinking markets while feeding, and feeding upon, inflation.

What Can Reduce the Price of Goods?

Reduction of taxes, interest, wages, and costs of governmental regulation can bring most prices down. Removal of multiple taxation of "equity capitalization" must be the starting point. It can provide incentives for the financing of reindustrialization without increasing interest rates.

Debt financing is highly tax-favored over equity capitalization. The interest dollar is deductible from corporate taxable income, but the dividend dollar is not. Compare the following results:

1. The distribution of $1.00 of interest costs the corporation approximately $0.48 (with a federal income tax of 46 percent and a state tax of 6 percent).
2. A dividend distribution of $1.00 requires the corporation to expend a total of over $2.08, assuming similar rates of income tax upon its profits before the nondeductible distribution is made.

The advantage of such debt financing over equity financing is more than four to one.

Upon receipt by a stockholder, the dividend is taxed again (presently up to 70 percent federal, plus state rates). Recent tax law changes in the Economic Recovery Tax Act of 1981 will reduce the maximum federal tax to 50 percent for individuals.

Interest paid by a corporation is taxed only when received by the creditor, thus making an incentive to finance business with borrowed capital. This provides a pressure for increased interest rates. As interest rates increase, the value of stock declines. The after-tax return on stock cannot compete with tax deductible interest rates. As equity capitalization decreases, increased borrowing forces interest higher, and inflation wins again.

Multiple taxation discourages equity investment and increases the cost of American goods and services of every kind.

This tax structure can be almost confiscatory of corporate earnings at the higher income levels of corporations and stockholders. If the balance, after corporate taxes, is distributed as a dividend to stockholders, about one-fifth (under recent tax changes) of the original profit dollar may remain for reinvestment in reindustrialization or for other use. Retention of earnings, investment credit, depreciation, employee benefit plans, expense allowances, heavy debt capitalization, and other devices may lower the corporate income tax.

Federal and state capital gains taxes, under recent changes, take about one-fourth of any appreciation in value, if the stock is sold. If additional capital is needed to replace these "tax costs," then borrowing, in competition with federal, state, and local governments, as well as with consumers, is necessary. This pumps up interest rates and, in turn, inflation. Refinancing debt at increasing interest rates may force a business into financial difficulty, resulting in a merger, liquidation, or bankruptcy unless income can keep abreast.

Removal of this tax structure, which favors borrowing by business, would encourage the financing of reindustrialization by equity investments. The lowering of "tax costs" of equity capital and, as a result, deescalation of the interest rates on borrowed capital would enable reduction in the price of goods of every kind.

Why should a corporation pay higher "tax costs" for its capital than does a partnership? Why not treat the corporation like a trust and allow deduction of amounts distributed as a dividend? If capital is "plowed back" for reindustrialization, why not allow a tax credit for the whole? Why should the borrowed dollar, obtained by the issue of a note, enjoy a lower "tax cost" than does the dollar obtained by the issue of stock?

"Tax costs" are variable costs, and tax laws must be restructured to help lower interest rates and create "tax competition" by placing tax burdens upon property, products, services, privileges, sales, and income which least adversely affect American prices in meeting foreign competition.

Recall that Karl Marx, nearly a century and a half ago, predicted that the capitalistic democracies would be brought to their knees through systems of progressive taxation.

What "Tax Costs" Can Be Reduced While Lowering Interest Rates?

A tax-free "capital gains rollover" could help finance reindustrialization while lowering interest rates. Nonproductive capital now stagnating in the inflated values in stocks, land, and other assets could thus be made productive. Values produced by inflation could energize deescalation by reducing the demand for borrowed funds.

To the extent assets are reinvested in reindustrialization financing, nonrecognition of gain could be allowed until the security received is sold or reinvested for other than a reindustrialization purpose. Such a "rollover" could activate, convert, and diversify idle capital to income-producing investments. This reinvestment could produce ordinary income and possibly increase overall tax revenue.

Without such incentive for reinvestment, a taxpayer may choose to hold nonproductive assets for long periods, even for generations, receiving a "stepped-up basis" at

each successive death. By this method the taxpayer can completely avoid the capital gains tax.

For individuals, this "capital gains rollover" would bring a tax advantage similar to that which has long been available to the corporation through nonrecognition of gain or loss upon incorporations, mergers, and consolidations. Such a "rollover" incentive could help restore the demand for American goods by reducing the "tax costs" of equity capital and interest costs of borrowed capital required for their creation.

How Can Markets Be Recaptured?

Recapture of markets requires the concentration of competitive power and the removal of obstacles to making better and cheaper American products.

The antitrust laws—to the extent that they hamper American competition with foreign cartels, combines, multinational corporations, or common marketing "communities of nations"—must be eliminated. These laws (the Sherman Antitrust Act of 1890 and the Clayton Act of 1914 and later) were aimed at the preservation of domestic competition by discouraging domestic monopolization. They have been outmoded by powerful foreign competition which has made "relevant markets" a worldwide geographical area for most products.

Pooled financing, research, technology, and marketing efforts by American manufacturers would enable more effective competition with foreign producers who can concentrate political and economic power in the global marketplace. If such international competition assured products of higher quality and lower prices, the principal purposes of the antitrust laws would be achieved, but at a far higher level of competition and in a broader area than such laws originally sought.

What Can Reindustrialization Accomplish?

From the ashes of defeat in World War II and destruction of its industry, Japan reindustrialized and made what the world would buy, from Christmas toys and cheaper shirts to pocket radios. The legal environment, technology, financing, and management and labor skills of that industrial base were then turned to ships and steel and automobiles.

Protected by the United States, Japan utilized its earnings to further reindustrialize for the competitive invasion of American as well as worldwide marketplaces.

Industrial America had begun its slide.

What Can Stop the Slide?

Improving the quality and decreasing the price of American-made consumer goods can cause the slide to bottom out and start an upward trend. The recapture and expansion of markets for consumer needs can balance and support and put to work the "high technology"essential for national defense.

Consumer needs of soaring populations for food, clothing, shelter, energy, health, comfort, convenience, and pleasure provide industry, be it "high" or "low" technology, opportunities for greater stability and diversification than periodic war and weapons production, scientific breakthroughs, and races into space.

Only when the quality of American goods deserves respect, and the tax-interest-wage-price spiral has been reversed, can American products regain consumer demand.

The People's Choice

The skill and will of the American people in a new espirit d'corps of "industrial nationalism" are the essential forces for reindustrializing America.

Will Americans pay the price? Will they give up the indexed wage or benefit increase? Will lenders lend at lower rates? Will sellers narrow profit margins? Will management and labor cooperate to make and sell a better-quality product which will be competitively priced? Will consumers show a preference for American-made goods? Will government lessen its eagerness to regulate and tax? Will business adequately regulate itself without governmental intervention? Will the "have" and "have not" populations suspend their contest for advantage in order to improve the economy as a whole?

These are some of the prices Americans must pay if they are to gain in economic security through reindustrialization.

The words of a famous American may help in finding the best legal environment for reindustrialization:

> *If a man make a better mousetrap, the world will beat a path to his door.*
>
> Ralph Waldo Emerson

If written with experience in the legal environment of today, a postscript would likely say:

> *—unless the price be pushed so high that consumers choose to pass it by.*

REINDUSTRIALIZATION ON A CHIP: KEY TO ECONOMIC GAINS IN THE 1980s

*Peter M. Ginter and William C. House**

For the last 10 years, U.S. firms have been losing shares of domestic and foreign markets in such key industries as automobiles, textiles, metal working machinery, electrical equipment, furniture, footwear, rubber, and steel. This decline has been occurring at a time when the U.S. economy is heavily dependent upon these industries for employment, stockholders, dividends, and reinvestment profits. Although total U.S. exports have risen from 9.2 percent of the GNP in 1970 to about 20 percent in 1980, the U.S. share of total world output has actually declined from 52.9 percent in 1960 to 36.7 percent in 1979.[1]

A number of explanations have been advanced for the declining world position of key U.S. industries. For instance, inflationary price increases in materials, labor, and energy advanced at faster rates in the 1970s than in the 1950s or 1960s. During the last two decades, the service and white-collar sectors, where productivity gains have historically occurred at a slower rate than in other segments of the economy, expanded employment more rapidly than the blue-collar, manufacturing sector. Moreover, slower capital formation rates and a decline the percentage of sales revenue devoted to research and development expenditures during the past decade have resulted in higher operating costs and slower rates of technological progress than were typical in the 1950s and 1960s. In addition, expanding government regulations have also forced business organizations to incur operating and capital costs unrelated to actual output, contributing to lower profitability and productivity growth rates.

Economists claim that, in the past decade, three factors largely determined productivity growth: labor (14 percent), capital investment (27 percent), and technological advances (50 percent).[2] It appears that in the future technology will be of increasing importance and may be the key to increasing the growth rate of productivity. For example, Edward F. Denison maintains that between 1948 and 1973, 1.4 percent of the 2.4 percent average annual increase in productivity growth was due to advances in knowledge and related causes.[3] Moreover, technological advances will lead to increases in capital investments and lower overall labor costs.

Economically advanced countries such as Germany and Japan have been increasing the share of GNP allocated to research and development, but the United States has actually decreased industrial research and development outlays from 2.1 percent of GNP in 1964 to 1.6 percent of GNP in 1978.[4] During the 1970s, the United States invested about 10 percent of GNP in capital outlays compared to 15 percent for Germany and 20 percent for Japan, while productivity growth averaged only 2.3 percent in the United States but 5.2 percent for both Germany and Japan.[5] This lag in U.S. research and development and capital investment outlays has contributed significantly to a slower rate of growth in technological progress during the 1970s.

In order to improve overall productivity, profitability, and competitive positions, nations should begin producing products best suited to their mix of labor, raw material, capital, and technological resources, in accordance with the principle of comparative advantage espoused centuries ago by David Ricardo.[6] In this regard a compelling case can be made for U.S. reindustrialization. Scarce, high-cost capital should be focused on high-technology industries such as semiconductors, electronic computers, and other electronic products. These industries are likely to offer the best chance to increase foreign and domestic sales and create jobs, and they represent a primary U.S. comparative advantage. Daniel T. Carroll, president of Hoover Universal, supports a comparative advantage strategy and stresses that business segments which offer the greatest long-run productivity leverage, such as pharmaceuticals, chemicals, and electronics, should be emphasized in future capital investments.[7]

Emphasis should be placed on one of the most promising high-technology segments, the semiconductor industry, which is experiencing skyrocketing sales as chip sizes are reduced, costs decline, and the number of functions performed increases. Semiconductor sales increased at an average annual rate of 19 percent during the 1970s.[8] A normal size chip in the 1970s contained 200,000 circuits; by the end of the 1980s a single chip may include up to four million circuits. A circuit that cost several dollars in the mid-1960s now costs less than one cent. Semiconductor sales were $8.5 billion in 1980 and are projected to be 9.7 billion in 1981, $12.2 billion in 1982, and $15.7 billion in 1983.[9] World markets for semiconductors have quadrupled in 10 years, and by 1990 sales could be six to eight times as large as they were in 1980.

In addition, advanced semiconductors that are smaller, cheaper, and more powerful than their predecessors will increasingly be used to replace mechanical processors and components. As manufacturers pack more and more intelligence into smaller and less costly chips, companies

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will be able to enter new markets or expand existing product markets just by buying or copying specific types of semiconductors. Microprocessors with faster computing speeds and larger storage capacities will improve the operating performance and lower the cost of many products, including industrial robots, telephone switching systems, industrial controls, home appliances, automobile engines, minicomputers, and word processors and other office equipment. As semiconductors and microprocessors are utilized in an ever-widening variety of consumer and industrial products, the total demand for chips should expand at an even faster rate in the 1980s and 1990s than in the 1970s.

While many proposed changes in government taxing and financing policies to promote reindustrialization are certainly debatable, several alternatives deserve closer attention in terms of facilitating the expansion of high-technology industries to promote economic growth. Accelerated depreciation rates on plant and equipment would increase cash flows and capital recovery rates, encouraging industries such as steel, autos, and textiles to use more electronic components in their processing equipment and basic products, thereby reducing operating costs. Faster tax write-offs on office appliances could encourage white-collar offices to replace costly labor staffs with electronic equipment at a faster pace, thereby improving office productivity and lowering total office costs. Allowing tax credits for increases in research and development outlays above base figures should help to spur the growth of advanced technology so crucial to improving the long-run competitive position of American industry. Above all, performance evaluation and reward systems should be modified so that short-term profits and safe projects are not overemphasized at the expense of longer-term capital investments with long lead times but potentially high payoffs.

The net effect of these policy changes should be to encourage larger investment outlays for microprocessor-driven equipment and more rapid development of microprocessor-based technology, thereby providing a sounder industrial base to help meet the competitive challenges of the coming decades.

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[1]Stanley J. Modic, "It's Time to Revitalize U.S. Industry," *Industry Week*, Jan. 12, 1981, p. 44.

[2]Leopold Froelich, "Robots to the Rescue," *Datamation*, January 1981, p. 86.

[3]John Walsh, "Is R&D the Key to the Productivity Problem?" *Science* 211, no. 13 (February 1981):687.

[4]"A Diminished Thrust from Innovation," *Business Week*, June 30, 1980, p. 60.

[5]Lester O. Thurow, "The Productivity Problem," *Technology Review*, November-December 1980, pp. 44-45.

[6]"Reindustrialization of America," *Dun's Review*, July 1980, p. 36.

[7]Bruce Hoard, "Strategics of Productivity Urged for Industry," *Computerworld*, Dec. 1, 1980, p. 25.

[8]Peter Grier, "U.S. Leads New Revolution Fought with Tiny Chips," *Christian Science Monitor*, Dec. 30, 1980, p. 1.

[9]William Pat Patterson, "Gathering Storm Clouds for Semiconductors," *Industry Week*, Jan. 26, 1981, p. 52.

(Continued from page 9)

The Japanese corporate culture is a lesson to be learned by U.S. business firms in order to improve their performance at home as well as abroad. The development of the Japanese type of corporate culture would help to promote workers' dedication to their tasks and loyalty to their firms instead of the high turnover rate and low productivity that presently affect U.S. firms. Although short-run results are important, U.S. business management should place more stress on long-run goals and less on the short-term financial ratios that prove to be detrimental to U.S competitiveness at home and abroad.

In the game of productivity, capital represents only one of the required ingredients for success; the other ingredient is found in people who work with such capital. Business management can learn from the Japanese to develop a corporate culture favorable to productivity. It is a difficult task which lies ahead, but it is not impossible, especially with the help of business schools that teach the importance of cultural values in the firm and of long-run corporate performance.

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[1]*Japan Economic Survey* 5, no. 3 (Washington, D.C.: Japan Economic Institute, Feb. 16, 1981):1.

[2]*International Letter*, no. 440 (Federal Reserve Bank of Chicago, Jan. 31, 1980):3.

[3]*Japan Economic Survey*, p. 6.

[4]"Tale of a Copycat," *The Wall Street Journal*, Jan. 15, 1981, p. 48.

[5]George A. DeVos, *Socialization for Achievement* (Berkeley: University of California Press, 1973), p. 12.

[6]"Sony: A Diversification Plan Tuned to the People Factor," *Business Week*, Feb. 9, 1981, pp. 88-89.

[7]"A Fatal Fascination with the Short Run," *Business Week*, May 4, 1981, pp. 20-22.

[8]*Asia's New Giant: How the Japanese Economy Works* (Washington, D.C.: Brookings Institution, 1976), p. 856.

[9]"Why There Are So Few Lawyers in Japan," *Washington Post*, Feb. 9, 1981, p. 16.

[10]"Auto Makers to Close 8 Plants Next Week," *The Wall Street Journal*, Feb. 6, 1981, p. 5.

[11]"Corporate Culture: The Hard to Change Values that Spell Success or Failure," *Business Week*, Oct. 27, 1980, pp. 148-60.

MID-SOUTH ECONOMY

BUREAU OF BUSINESS & ECONOMIC RESEARCH THE FOGELMAN COLLEGE OF BUSINESS AND ECONOMICS MEMPHIS STATE UNIVERSITY

STATISTICAL SUPPLEMENT

THE MID-SOUTH ECONOMY

Based on the latest months for which data are available, the Mid-South economy in the fourth quarter of 1981 showed signs of softening from the previous two quarters. The growth in personal income for the Mid-South states from the second quarter of 1980 to the second quarter of 1981 kept pace with the nation, and sales tax collections remained brisk. However, the employment picture is still cloudy in the Mid-South. The number of persons unemployed registered substantial increases in every Mid-South state. Alabama and Mississippi were the hardest hit, with unemployment rates for November 1981 of 11.4 percent and 9.0 percent, respectively. Manufacturing employment registered small gains in Tennessee and Arkansas, while Louisiana was the only Mid-South state to post a gain in non-manufacturing employment, up 3.4 percent from a year ago. Residential building activity remains depressed, with 14.0 percent fewer dwelling units started to date for 1981 in the Mid-South (excluding Alabama) compared to the same period in 1980. The United States has been experiencing the same difficulties, with the number of unemployed persons topping the eight million mark, and total dwelling unit starts dipping 45.4 percent from a year ago for a seasonally adjusted annual rate of only 857,000.

Civilian Labor Force

The civilian labor force in the United States totaled 106,926,000 in October 1981, up 1.4 percent from October 1980. Over the same period, the Arkansas and Tennessee civilian labor force grew faster than the national labor force, up 4.4 percent and 1.9 percent, respectively.

The number of persons unemployed throughout the nation in October 1981 reached 8,024,000, for an unemployment rate of 7.5 percent. All of the Mid-South states registered substantial increases in the number of unemployed persons from last year's levels. Alabama experienced the largest jump, up 29.3 percent from last November, causing its unemployment rate to remain the highest in the Mid-South at 11.4 percent for November 1981.

Non-Agricultural Employment

Non-agricultural employment in the nation for October 1981 registered a 1.2 percent increase from last October. Three of the five Mid-South states experienced declines in non-agricultural employment, while Louisiana and Arkansas posted gains.

Manufacturing employment in the United States was little changed from a year ago, while three of the Mid-South states showed some softening in the manufacturing sector from their levels of a year ago and this past summer.

Non-manufacturing employment totaled a seasonally adjusted 71,518,000 in October 1981, up 1.4 percent from last October. Four of the five Mid-South states registered declines. Tennessee's decline was the largest, down 4.1 percent from October 1980. Louisiana posted a healthy gain of 3.4 percent from last November.

Earnings

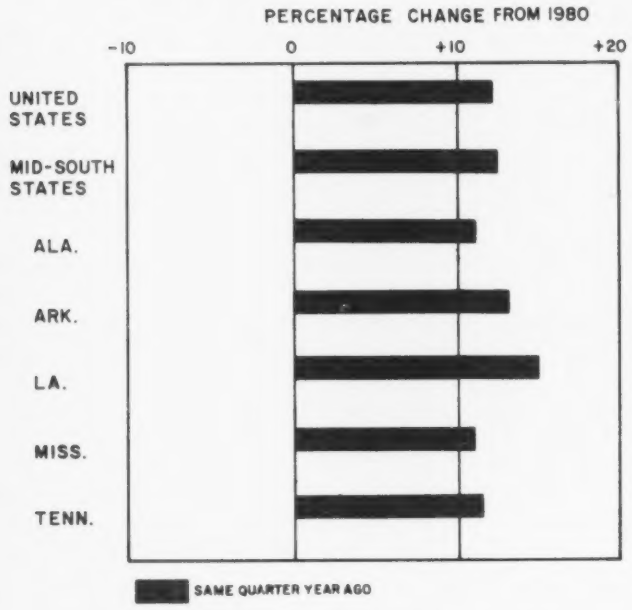
Average weekly earnings for production workers in manufacturing in the United States totaled $320.30 in October 1981, an increase of 7.4 percent from last October. Over the same period, Arkansas and Tennessee outpaced the national increase, up 9.3 percent and 9.0 percent, respectively. Average hourly earnings for the nation's production workers in manufacturing stood at $8.14 in October 1981, an increase of 8.7 percent from a year ago. Tennessee posted the largest gain in the Mid-South, up 9.3 percent.

Construction

The dollar value of total construction contracts awarded in Region 6 in November 1981 dipped 37.4 percent from last November but remained only 1.9 percent off the year-to-date levels compared to 1980. Tennessee was the only Mid-South state to register gains from last November, up 6.2 percent in total construction and 23.0 percent in total building. Mississippi experienced declines of 78.8 percent in the dollar value of total construction, with total building off 86.4 percent. Louisiana posted small declines in total construction and total building from last November but remained 8.4 percent and 14.0 percent, respectively, ahead for the first eleven months of 1981 compared to 1980.

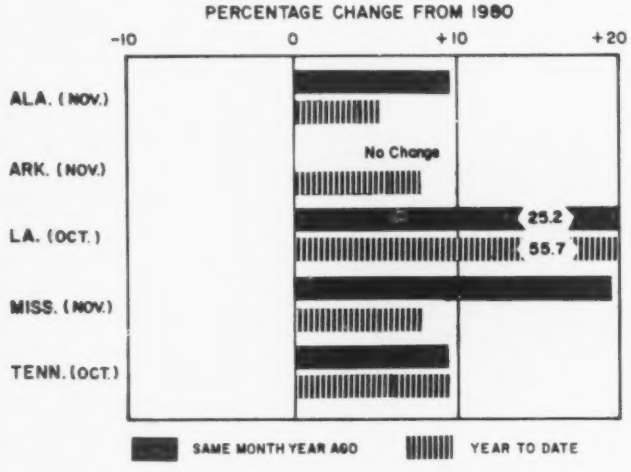
Residential construction contracts awarded in Region 6 in November 1981 declined 21.5 percent from a year ago

PERSONAL INCOME - II QTR 1981

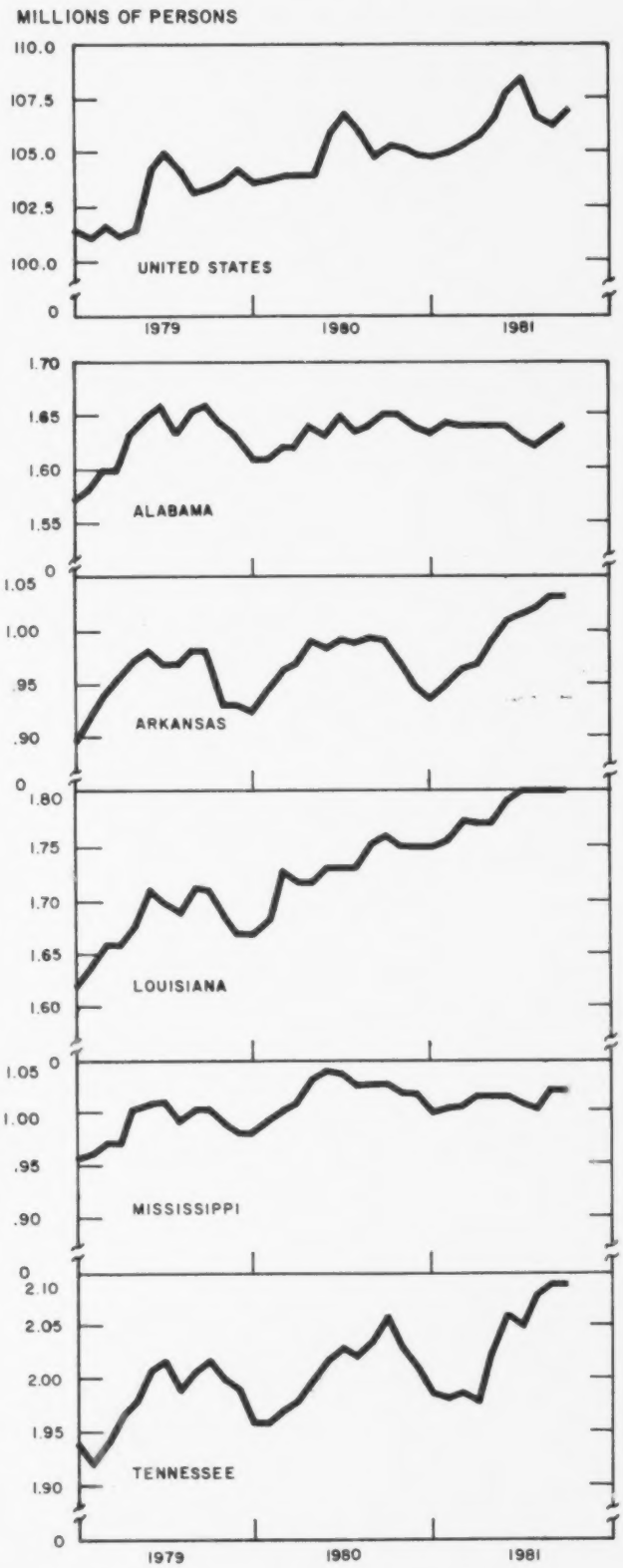


SOURCE: BUREAU ECONOMIC ANALYSIS

SALES TAX COLLECTIONS 1981



CIVILIAN LABOR FORCE



but remained 2.8 percent ahead for the year-to-date levels compared to 1980. Total dwelling units started to date in Region 6 totaled 68,270, down 10.3 percent from a year ago. Both Mississippi and Tennessee registered substantial declines in the dollar value of residential building and the number of total dwelling units started to date compared to 1980. Louisiana posted a 32.8 percent decline in value of residential construction from last November but was still 5.1 percent ahead in the number of dwelling units started to date compared to 1980. Arkansas managed to achieve a 3.3 percent increase in the dollar value of residential building from last November but started 15.7 percent fewer dwelling units to date compared to 1980.

The dollar value of non-residential building in Region 6 for November 1981 decreased 46.9 percent from November 1980. Louisiana and Tennessee posted gains of 19.5 percent and 92.4 percent, respectively, while Arkansas and Mississippi registered declines.

Public works contracts awarded in Region 6 for November 1981 declined 37.7 percent from a year ago, although Mississippi and Tennessee showed gains from November 1980. Arkansas registered a 37.3 percent drop

LABOR 1981	United States (Oct.)	Mid-South States: Alabama (Nov.)	Arkansas (Oct.)	Louisiana (Nov.)	Mississippi (Nov.)	Tennessee (Oct.)
Civilian Labor Force	106,926,000	1,637,500	1,036,300	1,778,700	1,020,000	2,097,400
Percent Change Year Ago	+1.4	- 0.7	+ 4.4	+ 1.3	- 0.4	+ 1.9
Unemployed	8,024,000	186,400	85,100	146,500	92,100	178,700
Percent Change Year Ago	+7.2	+29.3	+23.5	+22.2	+23.8	+25.0
Unemployment Rate						
1981	7.5	11.4	8.2	8.2	9.0	8.5
1980	7.1	8.7	6.9	6.8	7.3	6.9
Non-Agricultural Wage & Salary Employees	92,332,000	1,349,900	756,500	1,651,200	821,200	1,728,100
Percent Change Year Ago	+1.2	- 1.0	+ 0.3	+ 2.7	- 1.9	- 2.6
Manufacturing Employment	20,225,000*	350,000	213,900	212,700	214,900	515,900
Percent Change Year Ago	+0.6	- 2.5	+ 1.2	- 3.3	- 2.6	+ 1.2
Non-Manufacturing Employment	71,518,000*	999,900	542,600	1,438,500	606,300	1,212,200
Percent Change Year Ago	+1.4	- 0.4	- 0.1	+ 3.4	- 1.6	- 4.1
Average Weekly Earnings of Production Workers in Manufacturing	$320.30	$284.65	$256.14	$363.32	$240.47	$269.96
Percent Change Year Ago	+7.4	+ 4.9	+ 9.3	+ 8.5	+ 7.8	+ 9.0
Average Weekly Hours of Production Workers in Manufacturing	39.5	39.7	40.4	42.1	39.1	39.7
Percent Change Year Ago	-0.8	- 2.0	+ 1.7	+ 0.7	- 1.5	- 0.2
Average Hourly Earnings of Production Workers in Manufacturing	$8.14	$7.17	$6.34	$8.63	$6.15	$6.80
Percent Change Year Ago	+8.7	+ 7.0	+ 7.5	+ 7.7	+ 9.2	+ 9.3

*Seasonally adjusted.

Source: Departments of Employment Security and Survey of Current Business.

CONSTRUCTION 1981	United States (Oct.)	Mid-South Region 6[a] (Nov.)	Alabama (Nov.)	Arkansas (Nov.)	Louisiana (Nov.)	Mississippi (Nov.)	Tennessee (Nov.)	West Tennessee (Nov.)
Value of Construction Contracts Awarded								
Total Construction								
Percent Change Year Ago	+ 2.6	-37.4	NA	-14.9	- 5.8	-78.8	+ 6.2	-52.6
Percent Change Year-to-Date	+ 7.3	- 1.9		- 5.4	+ 8.4	-10.9	- 6.5	-21.9
Total Building								
Percent Change Year Ago	+ 5.4	-37.4	NA	- 4.8	- 5.4	-86.4	+23.0	-52.5
Percent Change Year-to-Date	+ 9.5	- 0.8		-12.9	+14.0	-28.7	- 6.6	-22.5
Residential Building								
Percent Change Year Ago	- 7.6	-21.5	NA	+ 3.3	-32.8	-38.9	-45.2	-44.0
Percent Change Year-to-Date	+ 8.0	+ 2.8		- 2.1	+17.3	- 9.0	-19.0	-29.6
Non-Residential Building								
Percent Change Year Ago	+19.3	-46.9	NA	-18.7	+19.5	-94.1	+92.4	-57.1
Percent Change Year-to-Date	+11.0	- 4.7		-29.6	+11.1	-48.1	+ 8.3	-14.6
Public Works and Utilities								
Percent Change Year Ago	+10.9	-37.7	NA	-37.3	- 7.2	+84.0	+19.8	-53.2
Percent Change Year-to-Date	+ 0.8	- 4.9		+27.1	- 6.1	+56.4	- 6.1	-19.3
Total Dwelling Unit								
Starts to Date	857,000[b]	68,270	NA	11,656	29,941	11,521	18,746	4,518
Percent Change Year Ago	-45.4	-10.3		-15.7	+ 5.1	-16.7	-26.7	-30.8

[a]Region 6 includes Arkansas, South Illinois, Louisiana, Mississippi, East Missouri, and West Tennessee.

[b]Seasonally adjusted annual rate.

from last November but remained 27.1 percent ahead for the year-to-date levels compared to 1980.

Finance

In banking activity as of October 28, 1981, the Mid-South District 8 underperformed the nation in total loans made. The District 8 increase was 7.6 percent from last October compared to the national increase of 9.9 percent. However, total deposits in District 8 were up 9.2 percent from a year earlier, outpacing the national increase of 8.0 percent. Net demand deposits in District 8 declined 18.7 percent from last October. Time deposits grew 20.1 percent from a year ago but failed to keep pace with the national increase of 26.9 percent.

Mortgage loans made in the Mid-South states in October 1981 compared to October 1980 were down substantially across the board. Net savings flow activity continued to register declines throughout the Mid-South from the level a year ago.

FINANCE	United States[1]	Mid-South States District 8 Only[2]	Alabama District 6	Arkansas District 8	Louisiana District 6 Only	Mississippi District 8 Only	Tennessee District 8 Only
Member Banks as of 10/28/81 Percent Change from Comparable Date 1980							
Total Loans	+ 9.9	+ 7.6	NA	+ 5.9	NA	+11.9	-0.1
Total Deposits	+ 8.0	+ 9.2		+ 7.5		+14.6	+1.1
Net Demand Deposits	-13.9	-18.7		-13.9		-17.7	-6.5
Time Deposits	+26.9	+20.1		+17.1		+24.9	+7.0

[1]United States data are for all domestically chartered commercial banks except for branches of foreign banks.

[2]Mid-South data are available only for District 8, which includes all of Arkansas, North Mississippi, and West Tennessee.

Source: Federal Reserve Board of Governors and the Federal Reserve Bank of St. Louis.

SAVINGS AND LOAN ACTIVITY October 1981	Alabama	Arkansas	Louisiana	Mississippi	Tennessee[1]
Mortgage Loans Made (millions)	$12.7	$ 20.0	$56.2	$ 12.0	$ 18.0
Percent Change Year Ago	-76.7	- 64.8	-58.9	- 59.4	- 76.6
Percent Change Year-to-Date	-19.9	- 35.4	- 3.4	- 14.2	- 18.9
Net Savings Flow (millions)	$19.3	$ 2.2	$33.8	($ 0.1)	($ 7.25)
Percent Change Year Ago	-11.1	- 92.3	-42.0	-100.4	-127.1
Percent Change Year-to-Date	-87.4	-108.2	-26.8	- 82.4	- 73.6

[1]Figures are for total loans made.

[2]Net savings flow equals new savings received plus dividends credited minus savings withdrawn.

Source: Federal Home Loan Banks of Little Rock, Cincinnati, and Atlanta.

THE TENNESSEE ECONOMY

The performance of the Tennessee economy began to sputter in the fourth quarter of 1981 based on the latest months for which data are available. Personal income grew 11.4 percent in Tennessee from the second quarter of 1980 to the second quarter of 1981, one percentage point below the overall Mid-South increase. Revenues from sales tax collections in October 1981 totaled $93.3 million, up 9.5 percent from last October. The December 1981 index of prices received by farmers in Tennessee stood at 122 (1977=100), two index points below the November 1981 level. However, Tennesseans managed in December 1981 to increase their total savings deposits at savings and loan institutions to $6.1 billion, up 3.2 percent from last December.

The number of persons unemployed for Tennessee in October 1981 totaled 178,700, up 25.0 percent from October 1980. This raised the unemployment rate to 8.5 percent of the civilian labor force, which totaled 2,097,400 for October 1981. Non-manufacturing employment was hardest hit, losing 52,600 jobs from a year earlier. However, manufacturing employment continues to register positive gains from a turnaround this July, gaining 6,100 jobs from last October.

Average weekly earnings for production workers in Tennessee totaled $269.96 in October 1981, an increase of 9.0 percent from a year earlier, outpacing the national jump of 7.4 percent. Average hourly earnings for October 1981 posted a healthy gain of 9.3 percent from a year ago but remained only 83.5 percent of the national average.

The dollar value of total construction activity in Tennessee totaled $276.2 million in November 1981, up 6.2 percent from last November. However, the year-to-date expenditures for 1981 lagged 6.5 percent behind the comparable 1980 level. Non-residential building jumped 92.4 percent from last November to total $188.8 million. The dollar value of residential building dropped 45.2 percent in November 1981, with only 18,746 dwelling units started since January 1981, 26.7 percent fewer than for the same period in 1980. The West Tennessee area was hit hard in November 1981, with substantial declines in the dollar value of construction activity across the board.

B.L.A.

THE STRESS OF PRODUCTIVITY

*Fred Zausmer and Roy Farris**

The economic wellness of the United States has, as a general rule, been judged by the nation's productivity. In 1979, however, the average daily worker's productivity decreased by 0.1 percent, and the rate has continued to fall. This is in contrast to the greater than 6 percent increases posted by other industrially developed nations.[1] Technology, the previous "golden touch" in the history of U.S. productivity, is once again being looked upon as the savior to cure the illness. Is this the appropriate approach?

The basic industrial goal is to produce goods and/or services at a cost that will result in income exceeding expenses while providing a degree of satisfaction conducive to the perpetuation of the cycle. The goal of improving the standard of living for the nation's citizens is also evident. However, profitability, as evidenced by the bottom line of the profit and loss statement, appears to have become the manager's major preoccupation and possibly even the master. Budgetary concerns of profit, growth, control, and others have become the drives propelling the manager to greater efforts.

The cliche "people are our most important asset" is a reality, but the human resource is often interpreted in a strictly materialistic sense. Employees are frequently inventoried as merely a part of the basic management resources: money, machinery, methods, materials, and people. Such a cataloging fails to consider the unique qualities and characteristics of the human resource that set it apart from the other categories of resources available to management. The human resource differs from each of the other resources in that it can neither be purchased (owned) nor created in the sense that the others can. A similarity exists, however, in that all the resources are treated as being consumable and leaving a residual, "industrial waste." In this context, the human asset is often viewed with a purposeful tunnel vision in an attempt to force the asset to conform to the following value concept of subordinates held by management in many organizations: "Humans passing through these portals, shed your human attributes at the door; we only desire those assets which will produce at our discretion and by our rules." Such ground rules fail to recognize or take full advantage of people's unique attributes of perception, flexibility, and emotion.[2]

While management is not mandated to adopt the above position, history seems to indicate that it has proven very successful and that it has indeed been instrumental in helping the United States achieve high status in the world markets. This productivity "success," however, has not been achieved without scars to the environment, the country's natural resources, national and international relationships, and most importantly, the organizational worker. The extent of the latter injury has never been completely investigated, nor has the fury of the hurt been fully expressed.

It should be noted that the concept of success is subject to interpretation. To one manager, the credit balance in the profit and loss account meets this criterion, while to another a designated return on investment must be earned before profitability is termed sufficient and the company is regarded as a success. The potential of the human resource has rarely, if ever, been applied as a criterion for success. If the "potential" concept were applied, the results would no doubt indicate that many organizations currently considered to be highly successful entities would be deemed losers, since the greatest asset potential (the human organism) of the organization has never been fully utilized or realized. In other words, "what could be" far outweighs "what is."

Simultaneously, businesses as well as nations are experiencing the embryonic stages of a "people rumble." Changes in personal values are being evidenced throughout the world. The United States is experiencing a strong bid by Americans for the fulfillment of goals and aspirations; a fair and equitable society; an opportunity for each citizen to participate in the forces that affect his or her life; and a confirmation that the democratic process does, indeed, work for all. This challenge is emerging at the most basic level of work itself.

> The questions have come down to society's responsibility to provide a higher quality of working life and increasing opportunities for those millions on the fringe who for so long have endured the reality of life in which all the fine talk about job enrichment and job humanization is meaningless.[3]

The theme of employees has been to change the Age of Stress to the Age of Eustress.

In addition, the concept of work is no longer perceived in the biblical sense as an everlasting punishment for falling from grace. On the contrary, work is being perceived as one part of a broader life experience aimed at total personal satisfaction, directed toward individual wholeness. Gradually, but surely, the formerly accepted "badge of honor" (physically manifested by ulcers, hypertension, migraine headaches, and cardiovascular diseases) associated per se as a natural occupational consequence is being rejected. Instead, the courts are being besieged with workers' compensation claims; unions are becoming very active on this "new front"; and legislative actions to meet

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employee needs are in evidence—with more to come on the horizon.

The authors contend that the "bottom line" variable that distinguishes potential-reaching behavior from lesser degrees of attainment rests in the organizational climate, one of the major indexes of which is stress. Positive stress (eustress) created by management in the working environment can, in the long run, promote productivity and profitability far beyond present levels. Conversely, negative stress (distress), if allowed to continue, will severely damage the productivity/profitability levels and injure the working society by creating human illness states beyond repair. Maslow very succinctly stated:

> it is well to treat working people as if they were high-type Theory Y human beings, not only because of the Declaration of Independence and not only because of the Golden Rule and not only because of the Bible or religious precepts or anything like that, but also because this is the path to success of any kind whatsoever, including financial success.[4]

What Is Stress?

Stress is a universal, experienced by all. It is any influence, whether arising from an internal or external environment, which interferes with the satisfaction of basic needs or which disturbs or threatens to disturb the state of equilibrium. The function of stress takes two forms: physiological and psychological.

As viewed by Selye,[5] physiological stress is a "state of the body" produced by extreme environmental stimuli (extreme cold or heat, accidents, or loud noises) acting on the body (wear and tear). In response to these stimuli, the body undergoes a general syndrome of responses causing changes in every tissue, organ, and fluid. Physiological stress can evoke psychological stress; for example, a severe burn patient placed in isolation may be distressed by the loneliness and/or concern for his/her state of health.

Physiological stress can become an occupational problem, but psychological stress is by far the more serious problem. In the case of psychological stress, the initiation mechanism is emotional. The stressor inciting this form of stress is anything that the person perceives as a threat, real or imagined, to survival or self-image, or wrongdoing as perceived by the individual, e.g., a manager advising an employee to do something against his/her beliefs or ethics, bribing an employee, or criticizing an employee in front of peers. The emotional reaction to this form of stress may be anxiety, fear, guilt, hate, or anger. Here, too, there is a relationship with the physical being of the person. The emotional stress may create physical health problems such as migraine headaches, peptic ulcers, gastritis, allergies, cardiovascular illness, hypertension, diabetes, and some forms of cancer.

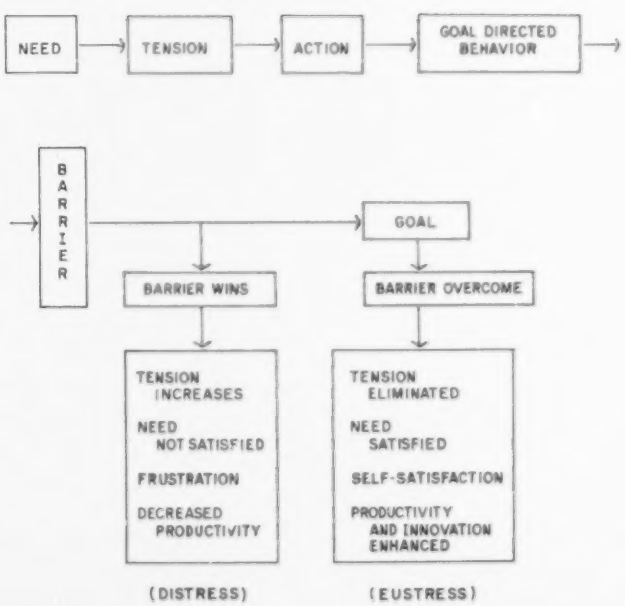
Related to stress is the organism's ability to adapt. If the adaptation process is successful, equilibrium is restored and there is no problem. However, if the adaptation is faulty, illness results or acts of passive hostility may be evidenced on the part of the worker. Adaptation is, in its comprehensive sense, the whole range of protective adjustments from the simplest motor action to the most complex interaction between individuals or entire nations. Limitations to this adaptive process include extreme stress, an overdriven system, reductions in adaptive energy, and a breakdown of negative feedback control.

This description of stress presents its negative face—distress—which could result in ill health and premature death. The other half of the picture is the positive side—motivational—coined by Selye as "eustress." This positiveness is best described by the familiar excitement of being "keyed up" while doing something worthwhile and stimulating. Although the physiological aspects of eustress are similar to those of distress, the results are on opposite ends of the continuum. Eustress is the spice of one's existence, while distress is the poison. The difference lies in the attitude and perception by which the person views the stressor. Basically, it is how a person "takes it" that determines the difference. Through conditioning, one's perceptions can be modified, thus causing the experience to be eustressful. It is eustress that provides people with the only outlet they have to express their talents and energies, to pursue happiness. Distress, on the other hand, results in the blockage of human talent, energy, and potential, thereby eliminating the pursuit of happiness.

Figure 1 presents a paradigm to illustrate the relationships between the environment, the individual, and the two-sided aspect of stress. Basically, behavior is need oriented: everyone acts with a purpose in mind, a goal, an objective. This need triggers the mechanism in the human system that causes action to "happen." Actions then are triggered through tension toward the accomplishment of the goal. If a barrier is encountered, frustration develops

Figure 1

BEHAVIORAL PARADIGM



and the goal line fades out of sight. For example, if the goal is job satisfaction through use of skills and abilities, and the job is basically industrially engineered for high productivity and low worker participation, then boredom, loss of interest in the job and company, standard production, absenteeism, etc., will evolve. If the condition prevails for a length of time and the employee fails to adapt to this negative environment, the consequences can be more serious. The opposite prevails when goals are reached. By this modality, self-satisfaction will result in a greater desire to innovate and increase the quality and productivity of the organization.

Distress at Work

The Wall Street Journal (June 11, 1970) reported the managerial behavior of a president of one of America's major airlines, indicating that he

> unmercifully chews out underlings with one of the foulest vocabularies in the executive suite. . . . He absentmindedly drops cigarette ashes on the floor while shouting obscenities at one subordinate or another. . . . He rules with an iron hand, and his philosophy is simple: use the hell out of them.

The following comments reflect the feelings of one employee concerning the work relationship and the environment at work:

> I hate my job. All I can do to keep from going crazy is to daydream, to forget how I'm wasting my years. The manager gave me an official manual. It told me what to do with my right hand, and my left hand, what time to take breaks, when to start, when to stop. It was demoralizing.[6]

Stress at the ground-floor level waiting to be spread is evidenced in a conversation with a surgical resident at a Veteran's Administration hospital. When congenially asked, "How do you like the cardiac patient experience you are getting at the V.A.?" the response, in a very crisp, dogmatic, and assured tone, was "They [the patients] are cheaper than using animals."

With examples such as these of the creation of stressful situations in the organizational environment, there should be little wonder why statistics reveal that over 14,000 workers are killed yearly and over 2.2 million more are either permanently or temporarily disabled as a result of work accidents and occupational diseases. In the auto industry, workers' compensation accelerated 43 percent over a five-year period while productivity accelerated only 13 percent.[7] Deeper investigation reveals that the famous auto assembly lines are absented on Friday by as much as 20 percent of the employees; turnover is high and quality is low. Throughout the nation's industrial system there is evidence of feelings of carelessness, restlessness, anger, and hatred. When the work is boring, monotonous, and constricting, and the managerial styles are predominantly dictatorial and insensitive, deplorable psychological effects are produced. The magnitude of some of these effects, in financial terms, is reflected in the following facts:[8]

- Premature employee death costs American industry $19.4 billion per year.
- Alcoholism costs industry about $15.6 billion annually due to absenteeism and medical costs.
- About 32 million workdays and $8.6 billion in wages are lost annually to heart-related diseases.

These costs are just the tip of the iceberg when one considers the loss in potential of the victims to themselves, to their families, to their jobs, and to society as a whole. Further statistics reveal that over $18.2 billion is lost each year through managers' absences, hospitalization, or death. The United States Clearing House for Mental Health Information points to a $1.7 billion annual decrease in the productive capacity of U.S. industry over the last few years because of stress-induced mental dysfunctions.[9]

Zausmer,[10] in a study researching the possible relationships between employee health, management styles, and the environment of the Oklahoma City Police Department, found that 31.3 percent of the research population was classified as hypertensive. Other major physical complaints included frequent tiredness, lack of energy, frequent cases of indigestion, headaches, and prolonged shoulder and neck pains. The respondents charged that poor management was, by far, the most bothersome aspect of their jobs, attributing their physical state to this deficiency. They believed that there was a lack of concern for employees by supervisors, politicians, and managers. In addition, they perceived their state incurable, since they had no opportunity to remedy the situation; nor did they feel hope for correction in the near future.

Other studies have shown that role ambiguity has been ascertained as distressful and affecting employee health. It has been reported that male employees who suffer from role ambiguity experience lower job satisfaction and higher job-related tensions. The greater the ambiguity employees report, the lower is the utilization of their intellectual skill and knowledge, accompanied by lower utilization of administrative and leadership skills. Psychological and physiological results of such job ambiguity include job dissatisfaction, elevated cholesterol levels, elevated heart rate, and increased smoking. All of these conditions are "pathways" to heart disease.

McLean[11] investigated the conditioning effects of social support on the relationship between job stress and individual strain. Support is viewed as "good relationships" between supervision and the employee (e.g., willing to listen, confidence, trust, approachability). Results of the study indicated that the effects of increased workload vary depending upon the quality of relationships with the manager, the work group, and subordinates. Elevated diastolic blood pressure and reduced serum glucose levels are related to workload when relations between employee and supervisor are poor. Conversely, good relationships serve as a buffer between the stress of increased workload and possible resulting physiological strains.

Communication is an organizational climate dimension often investigated in regard to employee satisfaction. Organizational structures designed to facilitate the achievement of entity objectives tend to create distressful communication problems. Messages transmitted from bottom to top tend to get chopped off. In addition,

messages transmitted across organizational lines tend to be reduced in content as well as in meaning. The upward messages that manage to seep through the hierarchical filter are predominantly those relating to quantitative data concerning profit and loss figures, cash flow, absentee rates, turnover, accidents, etc. Information relative to the needs, sensitivities, and capabilities of people is usually absent due to the inability to quantify the material and the lack of recognition that employees are "feeling" human beings. This creates frustration and distress in all employee ranks, often leading to ill health and always reducing the productivity potential of the organization.

Program for Potential

It appears that the traditional values of managers may have placed industry, generally, in a mismanaged position. In attempting to achieve the goal of profit maximization, management has ignored the main component used to attain that objective, the whole human being. The issue is whether anything can be done to change the trend whereby:

*Employees will experience stress as "eustress," thus being offered the opportunity to fulfill their potentials.

*The organization will have the opportunity to meet its potential by yielding the optimal productivity with an outstanding return on investment over a long period of time.

The answer to the question of whether anything can be done is yes. The program rests upon the reappraisal of the values of management. This, in turn, will impact upon the employees, changing perceptions and generating a switch from distress to eustress. The resulting organizational climate will then be conducive to innovation, job satisfaction, and other benefits associated with the ability to seek self-actualization.

A crucial issue to be initially resolved is determining the primary objective of the organization. The almost instantaneous response to such a question is "maximizing profits" or just "profits." Are profits the primary objective or are they a resultant? One cannot write a position description on how to make a profit. All activities of the organization are based on *means*, not *ends*. Consequently, while profits are mandatory for survival, they are a resultant of the means of accomplishment. Further, in discussing profits, the concern is that of degree or magnitude. It is contended that the traditional emphasis upon the ends will result in proof of the statement, "The maximum becomes the minimum for survival." On the other hand, if the means for attaining profitability become the primary objective, the unlimited potential of the collective human resource becomes the key variable. The potential of human resources mates synergistically with the potential of the organization, yielding a maximization of profits beyond expectations. Leonard Woodcock, president of United Auto Workers, stated during the 1973 Chrysler Corporation settlement, "We are challenging, in effect, whether human beings exist for the sake of production and profit, or whether we are engaged in production for the sake of human beings."

Managerial values are at the foundation of the concept of organizational objectives. Most managers are familiar with McGregor's X-Y concept dealing with beliefs concerning the nature of man. On the one hand, a person who advocates an X value system takes a negative view of employees, supporting the adoption of an authoritarian style of leadership. This value is reflected not only in the handling of employees but also in the actions relative to objectives, planning, policies, procedures, and job structures. On the opposite side, McGregor describes the Y value position. This position assumes a positive view of people which can be the basis for a climate in which employees utilize their abilities, grow and develop, enjoy their working lives, and fulfill their occupational needs.

A very succinct example of the application of McGregor's theory was cited in the *St. Louis Globe-Democrat* (August 1, 1980). A foreman at the Ford Motor Company very irately blamed lazy workers as the reason for placing Ford at Japan's mercy. He was X value oriented, perceiving workers as having only here-and-now substance rather than as assets for investment.

Magnetizing the concepts of objectives and values is "potential." On the average, persons do not utilize more than 30 percent of their potential. Further, organizational potential is directly related to employee potential utilization. Therefore, the organization is dependent upon the employee for the magnitude of "success" to be achieved. The willingness of employees to invest or pursue their potential with the organization is dependent upon the organizational climate created by management. This climate is based wholly upon managerial values.

A McGregor X-valued environment is antithetical to the investment of potential since it is anti-freedom oriented. It may be described as constantly wielding the "invisible whip," ready to punish and harass. Consequently, the worker perceives the environment as a threat, which becomes distressful to his psychological well-being. The employee's goal is to "toe the line—risk nothing." If potential is released, it is often utilized in negative terms against organizational objectives as manifested by passivity, slowdowns, or major incidents of violence. Further, evidence of such negative behavior is reflected in the profit and loss statement through costs for illness, accidents, high scrap rates, absenteeism, high turnover, and other negative production costs.

On the other hand, the adoption of the McGregor Y-value attitude will stimulate positive work activity involving the entire human organism. A condition of eustress will tend to be created. The habitually conditioned negative association of the workplace will gradually be supplanted by the "keyed up" feeling of satisfaction and accomplishment. The environment and the job will cause stimulation because the positive human aspects are being challenged and utilized. The job and the organization become a learning experience. This positive value of human beings, honestly implemented, will trigger eustress behavior whereby the worker is being charged with energy to perform positively, not defensively. Regardless

of the intensity of the successful activity, no scars become evident, physically or emotionally.

To implement a program based on these concepts requires very deep, strenuous, soul-searching behavior. However, while the process is lengthy and trying and involves hard work, it can be very rewarding. Defensive costs such as absenteeism, passive hostility, illness, workers' compensation claims, etc., will tend to become minimal, while productivity will increase. Technology, by itself, can never provide the benefits that are within the capability of the human being. It is only through the recognition of the human supremacy, combined with technology, that a quality of work life can be attained that will be mutually beneficial to industry, the employees, and society.

Conclusions

To halt the decline of productivity in the United States, managers must give up the dying management traditions based solely on the "touchable" concepts of technology and profitability. Such an approach is akin to taking aspirins as a cure for a headache. The true state of wellness becomes masked, never really attained, as the negative state of pain returns when the stimulus reappears. To bring the true state of wellness to the productivity system will require adopting a new learning system whereby the unlimited potential of humans becomes the paramount means for the attainment of ends. In this manner, dreams will become reality. Productivity, profitability, employee and organizational physiological and psychological true wellness, and the quality of working life will become mated and synergistic through the concept of eustress.

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[1]Conference on Productivity, University of Missouri, Rolla, Missouri, May 29, 1981.

[2]Abraham Maslow, *Eupsychean Management, A Journal* (Homewood, Ill.: Richard D. Irwin, Inc., 1965), p. 78.

[3]Wex Malone et al., *The Employment-Relations Cases and Materials* (St. Paul, Minn.: West Publishing Company, 1974), p. xi.

[4]Maslow, p. 41.

[5]Hans Selye, *Stress of My Life* (Toronto: McClelland and Stewart, Limited, 1977), p. 103.

[6]Jeanne M. Stillman and S. Daum, *Work Is Dangerous to Your Health* (New York: Pantheon Books, 1973), p. 4.

[7]Ibid.

[8]Phillip Goldberg, *Executive Health* (New York: McGraw-Hill, Inc., 1978), p. xi.

[9]John Ivancevich and M. Matteson, "Optimizing Human Resources: A Case for Preventive Health and Stress Management," *Organizational Dynamics* (New York: Amacom, 1980), p. 7.

[10]Fred Zausmer, "Factors of Stress in the Oklahoma City Police Department: A Consideration Thereof" (Doctoral dissertation, University of Oklahoma Health Sciences Center, 1976).

[11]Alan McLean, *Occupational Stress* (Springfield, Ill.: Thomas Publishing Company, 1974), p. 76.

FROM EDP TO MIS TO DSS: IS DSS ANYTHING NEW ?

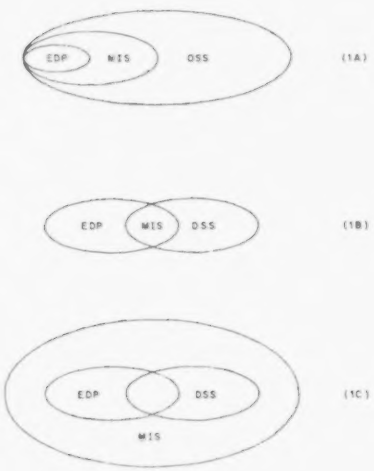
*Richard A. Kaimann and Elliott E. Erickson**

Decision Support Systems (DSS's) are portrayed as a new and vital management tool. The question to be asked is, "Is DSS really something new?" This article will examine and compare MIS and DSS to learn if the relationship is sibling or parent-child.

While one could look into the past in great detail, this article will retreat only as far as the beginning of the commercial computer data processing era, circa 1958. EDP grew rapidly in the 1960s with the advent of the IBM 1400 series. As the field expanded, so did the terms expressing the people, hardware, software, and the discipline itself. The term Electronic Data Processing (EDP) blended syntactically into Management Information System (MIS). Now, Decision Support System (DSS) has become a byword.

There are several perspectives for examining the relationships between EDP, MIS, and DSS. The first, in Figure 1A, depicts a grandfather-father-son chronology. The second, in Figure 1B, describes a philosophy that MIS is the overlap between computer power (EDP) and data file manipulation (DSS). The third conceptualization, shown in Figure 1C, suggests that MIS oversees both EDP and DSS. The latter two interface only where the executive-inquiry-oriented DSS requires hardware power from EDP.

Figure 1
POSSIBLE PERSPECTIVES OF EDP - MIS - DSS



Although these three views might not receive universal acceptance, few will deny that computer hardware power resides someplace in the structure of the firm. In an operational sense, it is staffed by the EDP people. The question of the EDP relationship to MIS is not the topic of this discussion. It has been aired historically and sufficiently. For the purpose of this article, the term EDP is viewed as synonymous with computer power. The focus of this article will be upon MIS and DSS. For that purpose, it is posited that they both execute on EDP equipment and maintained data files.

Who, then, do the MIS's and the DSS's serve? Clearly, a vast majority will agree that both are intended to support management in its decision-making capacity. To compare them, this article will first define the various levels of management. The decision processes and information needs of these management levels will then be described. Next, definitions of MIS and DSS will be presented and compared. Finally, the article will list and evaluate the similarities and differences between MIS and DSS.

Defining Management Levels

Kanter[1] divides the typical organization into the widely accepted levels of top management, middle management, and operating management. These three levels have also been referred to as the strategic planning level, the management control level, and the operating control level. This is a derivation of Dearden's infrastructure of strategic planning, managerial control, and operational control.[2] It might be noted that Kanter is writing about MIS. Dearden is writing about EDP.

The *EDP Analyzer*[3] shows the results of a study by Mintzberg that found that the basic activities of all three levels of management (from first-line supervisor through top executive) were remarkably consistent. All levels were characterized by work at an unrelenting pace, brevity, variety and fragmentation of effort, a preference for nonroutine activities, and a blend of rights and duties. While the basic activities of all levels show similar characteristics, the functions performed, the data and information with which the levels operate, and the time reference and environment within which these levels operate are quite different. The time dimension is crucial. So too is the structure of the decisions to be rendered. Because the use of computers in management (MIS or DSS) requires a thorough understanding of the needs in

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each specific management area, it is necessary to look into the three management levels in more detail.

Sjoberg, Canning, Alter, Kanter, and numerous others all see the top management level having a heavy planning orientation with a broad scope and minimal control orientation.[4] Top management's functional role involves developing short- and long-range objectives and then generating policies and strategies to achieve those goals. Thus, the time dimension of top management tends to be one to five years. The environment at this level tends to be unstructured with very few decision rules.

There is consistency in the definition of the middle management functions. While there are no clear lines to separate this mid-range from the levels above and below, there tends to be a middle management orientation toward only moderate planning with a narrower scope of activity and a somewhat stronger emphasis on the control aspects of managing. Middle management's functional role involves developing schedules and measures of performance to acquire and control the resources needed to implement top management's strategies. The time dimension of middle management tends to be between two weeks and one year. Middle management tends to be moderately structured with some defined decision rules.

Operating management has only minimal planning responsibility and a narrow scope of activity. This level is very strongly oriented toward the execution and control functions of management. These are in accordance with the schedules of middle management. Operating management tends to function in a day-to-day time frame and needs to be as efficient and precise as possible. The environment is very structured and has numerous defined decision rules.

Decision Processes and Information Needs

The decisions made at the three levels of management differ because of the different time orientation, scope, and environment at each level. The *EDP Analyzer*[5] discusses Keen and Morton's 3X3 matrix of the three levels of management and the structured, semistructured, and unstructured decision types. Structured operating management decisions require detailed, timely, and accurate data that are generally from within the organization.[6] Decisions at the operating management level tend to be performed frequently[7] and tend to be structured decisions with all or most decision rules (for selecting an alternative) known. These classes of decisions can more easily be programmed to be made by a computer because the needed data are generally internal data and the decision rules are known.

Unstructured decisions, which occur most commonly at top management levels, require less detail (summarized or high level) and consequently less precise or accurate information. These decisions occur less frequently and usually require information about the external world. These types of decisions cannot easily be programmed because the needed data are external, the decision rules are not known, and human judgment plays a major role in the selection of an alternative.

Between these two ends of the management spectrum, middle management attempts to make decisions. It functions in a semistructured environment with some of the decision rules known, and only some of the needed information is internal to the organization.

At first glance, the actual decision-making processes for each level of decision appear to be similar. The problem must be defined, the data gathered, the alternatives developed, and an alternative selected. Upon closer scrutiny, though, this similar appearance breaks down. The data that are needed and the way alternatives are developed and selected are far different for a long-range, future planning, unstructured, top management decision (e.g., to build a new plant) than for a today-class, structured, operating management decision (e.g., to reorder an item below reorder level).

The *EDP Analyzer*[8] also shows that each level of management may participate in each of the three decision types. Quite obviously, though, there are very few structured decisions (with decision rules defined) at the unstructured top management level and very few unstructured decisions (no rules defined) made by the highly structured operating manager.

MIS Definitions

In 1970, Sjoberg defined Management Information Systems as

> the information systems that are necessary to provide all levels of management in the firm (i.e., all decision systems in the firm) with the information they need for their proper function.[9]

Kanter, in 1972, defined MIS similarly:

> A system that aids management in making, carrying out and controlling decisions.[10]

Murdick and Ross and Katch also defined MIS:

> A system to provide information to management to aid in decision making.[11]

Although other authors have defined MIS somewhat differently than the five cited here, most definers recognize that one of the main functions of management is decision making. Thus, systems that aim to assist management are inherently trying to assist in the decision making. Obviously, Management Information Systems have achieved varying degrees of success in trying to assist management decision making, but the MIS definitions presented here appear to be generally acceptable.

DSS Definitions

Keen and Wagner defined a Decision Support System as

> a computer based system which is used personally on an ongoing basis by managers and their immediate staffs in direct support of managerial activities, that is, decisions.[12]

Alter writes that DSS's are

> systems designed specifically to faciliate decision processes (as opposed to making clerical transaction processing more efficient).[13]

Carlson states that DSS's are

> new approaches to providing computer services to managers [to] help them retrieve, manipulate and display information needed for making decisions.[14]

These and other DSS definitions try to emphasize that the user of the system is actually a manager and that a DSS is specifically designed to answer decision-maker questions (transactions) rather than to efficiently process clerical transactions. The implication is that MIS's were oriented only toward efficient processing of clerical functions.

Comparisons

The various authors and experts present a series of procedural steps that are to be performed by a proponent of each of the two disciplines. These are shown in a sequential fashion in Table 1. The choice of terms of the methodologies could vary, but the required tasks cannot change to any degree of significance.[15]

Table 1
A PROCEDURAL COMPARISON:
MIS vs. DSS

Management Information Systems	Decision Support Systems
1. Identify the area(s) involved and their *objectives*.	1. *Objectives* of decision area.
2. Analyze and understand the *current process*.	2. *Current* decision *process*.
3. Determine if and what specific functions can be designed into the MIS.	3. Normative decision process.
4. Identify *resources* available and existing constraints.	4. Comparison and analysis.
5. Develop *alternative* systems designs.	5. *Resources* available.
6. Perform a *cost-benefit* analysis and select an alternative.	6. Design of *alternatives*.
7. Design and program the MIS.	7. *Cost-benefit* evaluation.
8. Test and *implement* the system.	8. Selection, planning, and commitment.
	9. *Implementation*.
	10. Descriptive model of new decision process.
	11. Monitor of decision process.

Common Components

An attempt has been made to note the similarities by underlining key words and joining them with two-way connectors with their counterpart steps in the opposite schema. It becomes quite clear that the tasks required to analyze and design a DSS are very similar to those of an MIS analysis and design.

Katch[16] and others have defined the most common problems that impede successful MIS implementation and use. A comparison of the MIS problems and the DSS problems as noted by Canning and Alter[17] indicates that both need to overcome the same types of barriers. Common problems are:

1. Lack of user and management participation and involvement
2. Ease of use
3. Resistence to change
4. Timeliness
5. Accuracy of data and reports
6. System reliability

These are all key areas in the success or failure of an MIS or DSS. Part of the reason for these similar problem areas is the fact that MIS and DSS both have the same key ingredients:

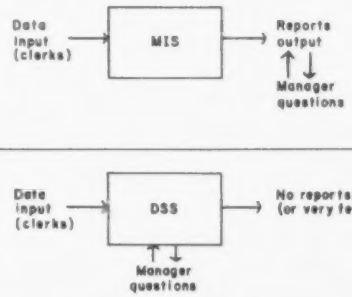
1. People
2. Computer hardware
3. Computer software

Since MIS and DSS use these same ingredients, there does not appear to be a clear distinction between the two disciplines in the "problems to overcome" arena.

Alter[18] makes the distinction that MIS has successfully addressed clerical *efficiency* by expediting and automating transaction processing, recordkeeping, and reporting. But, he goes on to say, DSS's are oriented toward managerial *effectiveness* rather than clerical *efficiency*. To the contrary, however, it appears that DSS's are really trying to improve the clerical efficiency of the manager. The DSS is oriented toward having the manager inquire from computer data bases on an ad hoc basis as opposed to manual searching through computer reports for information. Figure 2 portrays this distinction.

Figure 2

MANAGERIAL INQUIRY:
TWO PERSPECTIVES



In attempting to improve managerial effectiveness, it appears that DSS's are actually trying to improve:

1. The manager's transaction processing (questions)
2. Recordkeeping (the manager uses the computer files instead of filed computer reports)
3. Reporting (the manager gets the answer to specific questions)

Undoubtedly, this would help managers improve their effectiveness. But this process seems to be very similar to the MIS clerical efficiency improving process Alter defines. Other than the difference in end user (manager versus clerk), there is not a clear distinction between these two approaches.

Differences

The main differences between where MIS *has been* and where DSS is *trying to go* concern the users and application areas addressed. Management Information Systems

have been primarily oriented toward the structured decisions of the operating management areas. There are numerous reasons for this orientation, not the least of which is a quantifiable return on investment.

Structured operating environments typically are much more routine and repetitive, with most decision rules quite clearly defined (economic order quantities, salary rates and pay periods, etc.). These characteristics make a structured decision in an operating environment easier to computerize and also enable easier cost justification and return-on-investment evaluation. Therefore, it is logical for most organizations to address these areas first. Early MIS was/is beginning an evolution toward the semistructured and unstructured environments of middle and top management. This evolution has been slow and gradual, thereby giving rise to the introduction of a new term for the use of computers by management (DSS).

Without question, DSS's are intended to address different users and different applications in the more unstructured middle and top management of organizations. It is not clear, however, that the evolution of Management Information Systems is not headed in that same direction. MIS's are becoming more oriented toward data base and inquiry. They are also rapidly evolving toward exception reporting and graphic displays of information rather than raw data. The distinction between "where MIS *has been*" and "where DSS is *trying to go*" is much clearer than the comparison between "where MIS *is going*" and "where DSS *is going*." They are going in the same direction.

Management Information Systems have achieved much success in helping managers control and direct their functions. MIS, however, has achieved less success in the budgeting and planning functions of management. Again, much of the reason for this has been the MIS orientation toward the structured operating management areas that have much less planning orientation than the higher management levels.

Decision Support Systems specifically address the semistructured and unstructured management levels where planning, budgeting, and forecasting the future are major functions. This distinction is quite clear, but again, it is not clear that the evolution of MIS is not going in this direction.

Specific System Characteristics

Without question, one of the biggest complaints with Management Information Systems in the past has been their lack of flexibility. In trying to differentiate DSS's from MIS's, most are emphasizing the flexibility and ad hoc usage characteristics of Decision Support Systems.

Another difference between MIS and DSS is in time orientation. DSS's are oriented toward the future and planning for it. Most MIS's have tended to be oriented toward reporting past results. It is interesting to note that this future orientation of DSS's matches very nicely with the future and planning orientation of unstructured top management. It is not clear, however, whether DSS's are future-oriented by definition or just responding to the user's needs as MIS's have done and are continuing to do. If MIS's continue to evolve toward the top management levels, they will become future-oriented also.

Much has been said of the value of the "What if?" nature and capability of DSS. This brings up two serious questions.

First, the "What if?" is the purview of the simulationists. It is not new. Valuable yes, new no. The use of alteration of *values* of *variables* through a computer model is the essence of simulation and the "What if?" question. Enlightened management teams have used simulation for "What if?" analyses for several years.

Second, and more important, are the remaining two thirds of the "What if?" question. "What if" is future tense. Consider the other tenses. There are also the "What is?" and the "What was?" One cannot answer the "What if?" without the others.

The past and present are the realm of EDP recordkeeping and the old MIS's of operating management and the structured decision making they have served. The use of data for the future is the realm of the new MIS's and DSS's in the unstructured decision-making arena.

Conclusion

DSS is a new vernacular for MIS's that are evolving from operating management *and* structured decision making to new frontiers in middle and top management and unstructured decision making. A brief review of some existing MIS systems reveals numerous examples that are currently supporting decision processes. Material Requirements Planning (MRP) systems have attempted to help inventory and purchasing managers (operating managers) make better decisions. The Pentagon has had numerous MIS systems to answer military questions in an on-line mode, thereby enabling more informed military decisions. These systems may or may not address the "What if?" questions today's DSS's thrive on, but the fact remains that MIS's were and are supporting management decisions.

---

[1]J. Kanter, *Management-Oriented Management Information Systems*, 2nd ed. (Englewood Cliffs, N.J.: Prentice-Hall, 1977), pp. 5-9.

[2]J. Dearden, "Can Management Information Be Automated?" *Harvard Business Review*, November-December 1962, pp. 129-30.

[3]R. Canning, "Computer Support for Managers," *EDP Analyzer* 17, no. 5 (May 1979):6-7.

[4]S. Sjoberg, "Methods of Analysis and Construction; the Interplay Between Decision Model and Data Base," *Management Information Systems* (Princeton, N.J.: Auerbach Publishers, 1971); R. G. Canning, "APL and Decision Support Systems," *EDP Analyzer* 14, no. 5 (May 1976); S. L. Alter, *Decision Support Systems* (Reading, Mass.: Addison-Wesley, 1980); and Kanter.

[5]Canning, "Computer Support for Managers," p. 9.

[6]Sjoberg, p. 29.

[7]Ibid.

[8]Canning, "Computer Support for Managers," p. 9.

[9]Sjoberg, p. 29.

[10]Kanter, p. 1.

[11]R. G. Murdick and J. E. Ross, *Information Systems for Modern Management* (Englewood Cliffs, N.J.: Prentice-Hall, 1975), p. 9; D. Katch, "The Makings of MIS: What Is a Management Information System?" *Infosystems*, June 1978.

[12]P. G. Keen and G. R. Wagner, "DSS: An Executive Mind-Support System," *Datamation*, November 1977, p. 117.

[13]Alter, p. xi.

[14]E. G. Carlson, "Decision Support Systems: Personal Computing Services for Managers," *Management Review*, January 1977.

[15]D. Cougar and R. Knapp, *System Analysis Techniques* (New York: John Wiley and Sons, 1974), pp. 88-89.

[16]D. Katch, "The Makings of MIS: Bridging the MIS Gap," *Infosystems*, July 1978, p. 56.

[17]Canning, "APL and Decision Support Systems"; and Alter, chap. 5.

[18]Alter, p. 88.

BLACKS IN MAGAZINE ADS: ARE THEY GROWING IN NUMBERS ?

*Mary Ann Stutts**

Recognition of black consumers as an important segment of the American marketplace has been slow in coming. This fact is unfortunate, because the buying patterns of blacks indicate possible untapped market potential for certain products among the black population. The April 7, 1980, issue of *Advertising Age* made some significant observations about black purchasing power, indicating that blacks:

- Spend $101 billion yearly, not including credit.
- Represent approximately 12 percent of the population.
- Account for an estimated:
  - 23 percent of chewing gum purchases
  - 17 percent of floor wax purchases
  - 14 percent of instant mashed potato purchases
  - 36 percent of hair conditioner purchases

Astute marketers should avail themselves of research regarding the market potential of blacks, as well as research in message development and media usage by blacks.

Kevin Wall, Vice President of the Marketing Development Department at Coca Cola Company and himself a black, says that most of the money spent for media to reach black consumers is wasted. The approach used by most advertisers often fails because it incorporates elements that turn away the black segment of the audience. His research, and that of others, shows that the most effective way to reach the black consumer is through the exclusive use of blacks in those advertisements aimed at black target markets. Wall states that blacks are not comfortable with interracial advertisements that focus on social, business, and status interactions. They also are sensitive about the manner in which the blacks are portrayed in such settings. Resentment quickly occurs if blacks infer that the inclusion of blacks in an advertisement is a mere token recognition on behalf of white commercialism. Even if the advertisement is perceived to be realistic, blacks may view it as downgrading their role in life.[1]

Blacks in Magazine Ads: 1940-1965

This article focuses on the use of black models in advertisements appearing in mass circulation magazines. In 1953, Shuey, King, and Griffith reported on a study in which they analyzed the occupational status portrayed by black models appearing in advertisements from 292 issues of *Life, Saturday Evening Post, Time, New Yorker, Ladies Home Journal,* and *Collier's* during the period from 1940 to 1950.[2] These researchers found black models pictured in less than 1 percent of the advertisements in the issues studied. Also, nearly 80 percent of all the blacks that did appear in the advertisements were portrayed as cooks, maids, and servants.

Cox duplicated a portion of the Shuey, King, and Griffith study in 1967 and 1968.[3] He found that slightly more than 2 percent of all identifiable adults pictured in the advertisements were black. However, in the 15 years since the Shuey study, significant shifts had occurred in the occupations portrayed by black models in advertisements. In 1967, over 55 percent of the black adults pictured in magazine advertisements portrayed entertainer, sportsman, professional, business, student, or clerical roles, whereas in the 1958 Shuey study only 6 percent of the blacks appearing in advertisements were portrayed in such roles.

Colfax and Sternberg questioned the qualitative presentation of black models when they did a second replication of Cox's study in 1970.[4] In the magazine advertisements that they examined: (1) 40 percent of all advertisements picturing blacks showed them on the covers of record albums being advertised, (2) more than half of all black models in non-record-album advertisements were "token blacks," appearing with five or more white people at the same time, (3) one-third of the non-record-album advertisements had only black children in them, and (4) another 10 percent of the non-record-album advertisements showed blacks as recipients of welfare or charity.

In 1969, Kassarjian presented an analysis of advertisements using black models in mass circulation magazines over the 20-year period from 1946 to 1965.[5] The study used advertisements appearing in 12 national magazines during the years 1946, 1956, and 1965. Kassarjian found that:

1. The frequency of the use of black models in advertisements was U-shaped; that is, the number of advertisements using black models fell from 1946 to 1956, but rose again in 1965 to approximately the 1946 level. (See Figure 1.)
2. Depiction of blacks in laborer or service jobs dropped dramatically during the entire period. In 1965, this category constituted less than 15 percent of the total number of advertisements depicting blacks.
3. The percentage of "all black" advertisements remained fairly constant over the period.

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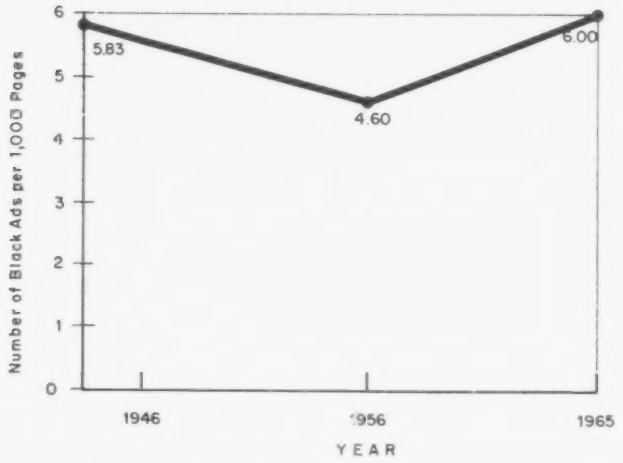
4. Mixed nonpeer advertisements dropped dramatically, while mixed peer advertisements rose almost as rapidly.

Figure 1

USE OF BLACK MODELS IN MAGAZINE ADVERTISEMENTS
1946-1965



Source: The figures are from Harold H. Kassarjian, "The Negro and American Advertising, 1947-1965," *Journal of Marketing Research*, February 1969, table 6, p. 36.

Two particular points are worth noting regarding the Kassarjian study. First, the use of "all black" advertisements failed to increase to any significant degree. Second, the overall use of black models in magazine advertisements was quite limited (about one-half of 1 percent). As seen in Figure 1, there were 5.83 black ads per 1,000 pages in 1946. This figure fell to 4.60 in 1956 and rose back to 6.00 in 1965. These figures represent index numbers determined by dividing the total number of ads containing a black in each year by the total number of pages published that year.

Blacks in Magazine Ads: 1965-1975

The purpose of the study described in this article, which duplicates a portion of the Kassarjian study,[6] was to determine the incidence of using black models in magazine advertisements between 1965 and 1975. Mass circulation magazines were selected as the advertising media to be studied. The magazines chosen were the same ones used in the original Kassarjian study: *Esquire, Fortune, Good Housekeeping, Harper's Magazine, Life, Mademoiselle, New Yorker, Newsweek, Popular Mechanics, Sports Illustrated, Time,* and *Vogue*. All advertisements appearing in each magazine were viewed, and certain data were recorded for the years 1965, 1970, and 1975.

Specifically, the number of advertisements per 1,000 pages containing blacks, whites, and no people were noted for each magazine for each of the years 1965, 1970, and 1975. No attempt was made to delete repetitions of an advertisement either within or between magazines. The magazines used for this study were obtained in the central Texas area. Some of the magazines were regional issues, and this may account for this difference between Kassarjian's 1965 index figures and those of the present study, since Kassarjian used issues from the Los Angeles area.

Sample means from the populations were compared using the Student's "t" distribution statistical test of significance. Dependent samples, such as the one used here, include samples that may be paired so that each observation in one sample may be related to a particular observation in another sample. The "t" statistic lends itself to this type of analysis and thus was considered an appropriate method of comparison of sample means.[7]

Table 1 groups all advertisements into three major categories—black, white only, and no people—and lists the percentage of each group that was observed in the magazines. Each magazine has its own characteristics from year to year, but the totals are important. In 1965, the majority of the advertisements featured white models only, followed closely by advertisements containing no people (53.45 percent versus 45.70 percent). Advertisements containing black models amounted to less than 1 percent of the total (0.85 percent). Two magazines, *Good Housekeeping* and *Popular Mechanics*, were found to have no black models depicted in their advertising during 1965.

Table 1
PERCENTAGES OF ADVERTISEMENT TYPES BY MAGAZINE AND YEAR

	1965			1970			1975		
Magazine	No People	White Only	Black	No People	White Only	Black	No People	White Only	Black
Esquire	40.71	57.64	1.66	58.05	40.32	1.62	47.54	50.28	2.17
Fortune	60.93	38.59	0.48	61.06	37.18	1.76	63.57	34.41	2.22
Good Housekeeping	50.70	49.30	0.00	42.18	55.41	2.41	57.48	40.79	1.73
Harper's Magazine	54.82	43.95	1.23	54.44	40.48	5.08	62.64	33.03	4.33
Life	42.02	57.69	0.29	44.71	52.73	2.56	—	—	—
Mademoiselle	19.14	79.26	1.60	26.01	71.85	2.16	17.60	80.78	1.62
New Yorker	55.10	46.10	0.80	71.14	27.85	1.05	62.17	36.57	1.26
Newsweek	49.98	49.19	0.83	55.53	42.28	2.19	48.45	48.82	2.73
Popular Mechanics	13.34	86.66	0.00	61.79	37.34	0.87	52.22	66.05	1.73
Sports Illustrated	52.95	46.44	0.61	46.38	51.12	2.50	52.93	43.43	5.64
Time	52.04	47.36	0.60	46.96	50.40	2.64	52.67	44.48	2.85
Vogue	7.90	89.57	2.53	31.28	65.25	3.47	16.76	82.75	0.49
Totals	45.70	53.45	0.85	53.33	44.63	2.04	50.22	47.79	1.99

The totals represent an index number determined by dividing the total number of ads containing either no people, white only, or black only by the total number of ads in the 12 magazines for each year. Therefore, the totals vary slightly from taking a simple average of the percentages for each year.

A noticeable shift had taken place by 1970. Advertisements containing no people had become the dominant form (53.33 percent), with advertisements featuring black models increasing to 2.04 percent of the total. Both these shifts occurred at the expense of advertisements featuring only white models (44.63 percent). The change in advertisements using black models as a percent of total advertisements from 1965 to 1970 was found to be significant at the .01 level.

By 1975, no significant changes had occurred relative to 1970, but the data suggest the possible beginnings of a reverse in the previous upward trend. Advertisements employing black models had declined slightly (to 1.99 percent), while advertisements using only white models seem to have become more prevalent in terms of percentages (47.79 percent).

In the 1965-1970 period, when advertisements containing black models increased significantly, advertisements

depicting only whites decreased and advertisements using no people increased, but neither by a significant degree. From 1970 to 1975, advertisements in which blacks appeared became fewer in number, white-only advertisements increased, and advertisements without people decreased. However, none of the gains or losses was statistically significant.

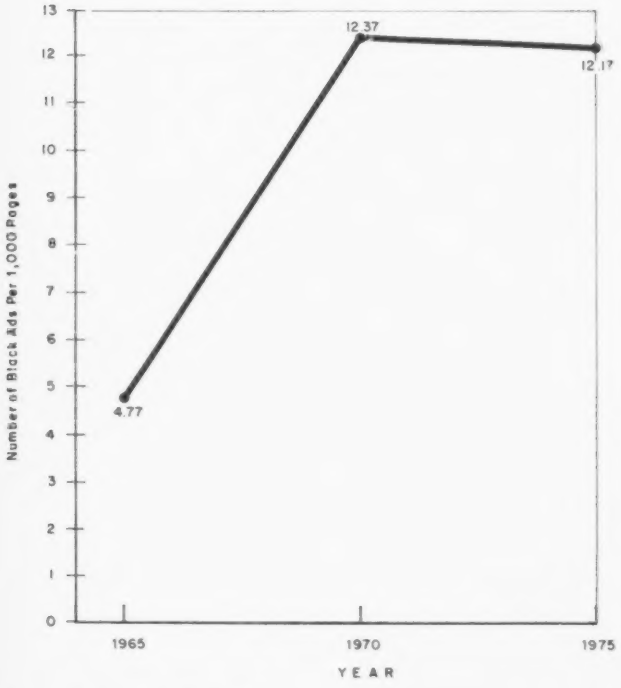
Table 2 shows that there was a significant increase in the number of black ads per 1,000 pages from 1965 to 1970 (from 4.77 to 12.37). The number of black ads per 1,000 pages declined from 12.37 in 1970 to 12.17 in 1975; this decrease was not statistically significant. Figure 2 shows graphically that advertisements using black models increased significantly from 1965 to 1970, but then leveled off. One could hypothesize that this leveling off is a result of: (1) reduced concern by advertisers with racial representation in ads once the government pressure of the 1960s had eased, (2) movement of advertising aimed at the black target markets to black media, or (3) feelings among advertisers that the current incidence of black models in advertisements is adequate. From a advertising perspective, alternative 2 or 3 seems plausible. As more "all black" media have appeared, advertisers wishing to capture a particular black target market perhaps have shifted some of their advertising to "all black" media. In a recent survey of magazine readership among black women and black men[8] (see Tables 3 and 4), it was found that

Table 2
BLACK ADS APPEARING IN THE SURVEY

	1965		1970		1975		Total	
Magazines	Percent of Total	Ads per 1,000 pp.	Percent of Total	Ads per 1,000 pp.	Percent of Total	Ads per 1,000 pp.	Percent of Total	Ads per 1,000 pp
Esquire	9.50	9.53	4.26	9.00	5.41	9.90	5.69	9.46
Fortune	1.65	1.28	3.72	8.88	6.59	11.43	4.51	6.67
Good Housekeeping	0.00	0.00	6.38	13.56	6.55	10.87	5.12	7.83
Harper's Magazine	3.31	4.57	5.67	22.22	5.65	19.85	5.20	14.54
Life	2.48	1.04	10.64	15.69	—	—	5.36	6.89
Mademoiselle	8.26	7.95	5.50	11.08	5.41	9.53	6.01	9.58
New Yorker	33.47	8.94	13.50	10.43	19.29	12.26	19.55	10.58
Newsweek	9.09	4.15	9.57	10.11	14.12	13.74	11.05	9.06
Popular Mechanics	0.00	0.00	3.19	6.51	3.53	7.31	2.68	4.35
Sports Illustrated	7.44	3.62	8.33	11.07	15.06	15.81	10.48	9.75
Time	4.96	2.10	11.17	9.67	16.71	15.67	11.86	8.71
Vogue	19.83	10.68	18.26	27.14	1.88	3.41	12.92	14.95
Totals[1]	100.00	4.77	100.00	12.37	100.00	12.17	100.00	9.38

[1]The totals represent an index number determined by dividing the total number of ads containing a black each year by the total number of pages published that year. Therefore, the total varies slightly from taking a simple average of the ads per 1,000 pages for each year.

Figure 2
USE OF BLACK MODELS IN MAGAZINE ADVERTISEMENTS
1965 - 1975



Source: Derived from Table 2.

Table 3
MAGAZINE READERSHIP AMONG BLACK WOMEN[1]

	Read Last 2 Months		Read Regularly	
Magazine	1979	1978	1979	1978
Ebony	47	47	31	29
Jet	37	41	25	26
Essence	22	27	13	15
Better Homes & Gardens	18	20	9	9
Good Housekeeping	17	21	10	11
Women's Day	16	15	11	9
Family Circle	15	15	9	8
People	12	14	5	6
Ladies Home Journal	11	13	6	7
McCall's	11	10	6	5
Black Stars	9	12	5	5
Vogue	7	9	4	4
American Home	5	8	2	3
Black Enterprise	5	4	2	2
Encore	5	6	2	2
Sports Illustrated	4	4	2	1
Mademoiselle	3	6	2	3
Miss Black America	3	4	1	2
Total Black Women (Base)	3,014	2,025	3,014	2,025

[1]All figures are percentages except total base number.
Source: Lee Slurzberg Research National Black Omnibus Poll, as reported in *Advertising Age*, April 7, 1980, p. S-22.

Table 4
MAGAZINE READERSHIP AMONG BLACK MEN[1]

	Read Last 2 Months		Read Regularly	
Magazine	1979	1978	1979	1978
Jet	40	40	25	25
Ebony	38	40	22	23
Sports Illustrated	23	25	14	14
Black Sports	15	15	9	7
People	10	10	4	4
Black Stars	9	11	5	5
Black Enterprise	7	10	4	5
Better Homes & Gardens	6	7	3	2
Black Business Digest	3	5	2	2
Encore	3	5	2	2
Total Black Men (Base)	3,000	1,965	3,000	1,965

[1]All figures are percentages except total base number.
Source: Lee Slurzberg Research National Black Omnibus Poll, as reported in *Advertising Age*, April 7, 1980, p. S-22.

black magazines such as *Ebony*, *Jet*, and *Essence* were the top magazines read by blacks. It is also possible that advertisers are satisfied with the current level of exposure of black models in advertisements and do not feel that significant changes in advertising strategy are necessary. These alternatives were beyond the scope of this study but could be pursued in other studies.

Conclusion

It appears that magazine advertising directed toward blacks has experienced very little growth during the 10 years from 1965 to 1975. The extent to which the black consumer is cultivated by advertisers is still small relative to the attempt to influence the white consumer. Blacks represent approximately 12 percent of the American population and are potential consumers for most of the same products whites consume. If magazine advertisements are to be successful in appealing to these various market segments, the inclusion of blacks in magazine advertisements should be an important consideration for advertisers.

---

[1]Marcus Alexis, "Patterns of Black Consumption," *Journal of Black Studies*, September 1970, pp. 55-73.

[2]Audrey Shuey, Nancy King, and Barbara Griffith, "Stereotyping of Negroes and Whites: An Analysis of Magazine Pictures," *Public Opinion Quarterly*, Summer 1953, pp. 281-87.

[3]Keith Cox, "Changes in Stereotyping of Negroes and Whites in Magazine Advertisements," *Public Opinion Quarterly*, Winter 1969-1970, pp. 603-606.

[4]J. David Colfax and Susan Sternberg, "The Perpetuation of Racial Stereotypes: Blacks in Mass Circulation Magazine Advertisements," *Public Opinion Quarterly*, Spring 1972, pp. 8-18.

[5]Harold H. Kassarjian, "The Negro and American Advertising, 1946-1965," *Journal of Marketing Research*, February 1969, pp. 29-39.

[6]Kassarjian repeated his original study in 1969 and again in 1973 [Kassarjian, "Evidence on the Changing Image of Black People," in *Emerging Issues in Black Economic Development*, Benjamin F. Bobo and Alfred E. Osborne, Jr., eds. (Lexington, Mass.: Lexington Books, 1976), pp. 167-87]. Six additional magazines were included in the 1969 and 1973 studies. The 12 magazines used in the present study are comparable only to those used in Kassarjian's original study.

[7]William Mendenhall and James E. Reimuth, *Statistics for Management and Economics*, 2nd ed. (North Scituate, Mass.: Duxbury Press, 1974), pp. 163-73.

[8]Lee Slurzberg Research National Black Omnibus Poll, as reported in *Advertising Age*, April 7, 1980, p. S-22.

U. S. CONSUMER PRICE INDEX - U[1] (UNADJUSTED)
1967 = 100

Month	1978 CPI	Percent Change Month Ago	Percent Change Year Ago	1979 CPI	Percent Change Month Ago	Percent Change Year Ago	1980 CPI	Percent Change Month Ago	Percent Change Year Ago	1981 CPI	Percent Change Month Ago	Percent Change Year Ago
Jan.	187.2	+ 0.6	+ 6.8	204.7	+ 0.9	+ 9.3	233.2	+ 1.4	+13.9	260.5	+ 0.8	+11.7
Feb.	188.4	+ 0.6	+ 6.4	207.1	+ 1.2	+ 9.9	236.4	+ 1.4	+14.1	263.2	+ 1.0	+11.3
Mar.	189.8	+ 0.7	+ 6.5	209.1	+ 1.0	+10.2	239.8	+ 1.4	+14.7	265.1	+ 0.7	+10.6
April	191.5	+ 0.9	+ 6.6	211.5	+ 1.2	+10.7	242.5	+ 1.1	+14.7	266.8	+ 0.6	+10.0
May	193.3	+ 0.9	+ 7.0	214.1	+ 1.2	+10.8	244.9	+ 1.0	+14.4	269.0	+ 0.8	+ 9.8
June	195.3	+ 1.0	+ 7.4	216.6	+ 1.2	+10.9	247.6	+ 1.1	+14.3	271.3	+ 0.9	+ 9.6
July	196.7	+ 0.7	+ 7.7	218.9	+ 1.1	+11.3	247.8	+ 0.1	+13.2	274.4	+ 1.1	+10.7
Aug.	197.8	+ 0.6	+ 7.9	221.1	+ 1.0	+11.8	249.4	+ 0.6	+12.8	276.5	+ 0.8	+10.9
Sept.	199.3	+ 0.8	+ 8.3	223.4	+ 1.0	+12.1	251.7	+ 0.9	+12.7	279.3	+ 1.0	+11.0
Oct.	200.9	+ 0.8	+ 8.9	225.4	+ 0.9	+12.2	253.9	+ 0.9	+12.6	279.9	+ 0.2	+10.2
Nov.	202.0	+ 0.5	+ 9.0	227.5	+ 0.9	+12.6	256.2[a]	+ 0.9[a]	+12.6[a]	280.7	+ 0.3	+ 9.6
Dec.	202.9	+ 0.4	+ 9.0	229.9	+ 1.1	+13.3	258.4	+ 0.9	+12.4			
Annual Avg.:	195.4			217.4[a]	Annual Change %	11.4	246.8	Annual Change %	13.5		Annual Change %	

[a]Revised.

[1]The Consumer Price Index for All Urban Consumers reflects the buying habits of about 80 percent of the non-institutional civilian population of the U.S. and also uses a market basket based on the 1972 and 1973 expenditure survey.

Source: U.S. Department of Labor, Bureau of Labor Statistics.

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NEW GROWTH OPPORTUNITY: THIRD-WORLD MARKETING

*Leslie M. Dawson**

The search for foreign market opportunities capable of yielding higher profit and investment return is no longer the exclusive province of the giant multinational. Intermediate and smaller businesses—many with no previous international experience—are now looking to foreign markets as a solution to saturation and intensified competition in the domestic marketplace.

Areas most closely resembling the U.S. market tend to come to mind first. Certainly, opportunities abound in Canada, Great Britain, and Western Europe. But so do the same problems that pervade the U.S. market: declining growth rates, brand profusion, and narrowed profit margins. Moreover, protectionist sentiments in the industrialized economies are on the upswing, largely as a result of Japan's exceptional success in the world marketplace.

Meanwhile, the less developed countries of Asia, Africa, and Latin America stand as largely untapped, genuine growth markets. For countless millions in such nations, incomes are steadily rising and intellectual horizons expanding, thus promising a present and future market of staggering potential. For the firm that might consider some degree of local manufacture in such countries, they offer bountiful resources and a cheap labor supply. The icing on this cake of opportunity is that less developed countries (LDCs), anxious to attract capital and technology, offer varying investment and trade incentives not to be found in the developed world.

Yet, with all these advantages, third-world markets have evoked, at best, lukewarm interest even for the profit-hungry multinational corporation. The reason, of course, is that LDCs typically exhibit a host of internal "demons": political instability; sectors of abysmal poverty; wildly unequal patterns of income distribution; and grossly inadequate infrastructure facilities. Moreover, LDC governments have established an unfortunate track record of sudden expropriation of foreign-owned property.

However, in nearly every case where a foreign firm has come to grief in a third-world country, examination of the facts shows the firm itself to bear a strong measure of the blame. All too often, multinational corporations enter LDC markets with a quick strike strategy: minimal investment and rapid repatriation of profit. They frequently show a remarkable insensitivity to the developmental goals and aspirations of the host country. Often, they try to capture a short-term profit opportunity while paying little heed to indirect social and economic consequences of their market entry. They are apt to choose such market targets as wealthy industrial customers or the small, elite consumer segment, remaining aloof to the needs of the masses. Such actions have caused these corporations to be perceived widely in the third world as agents of economic exploitation, and moves against them by LDC governments are not infrequently triggered by a boiling over of public resentment.

Clearly, there are significant risks in entering markets that are inherently volatile and unpredictable. Yet, the potential rewards for successful entry are more than commensurate. This is true not only in terms of possible profit and investment return in a growth market, but also in terms of a moral reward for constructive response to the needs of the relatively disadvantaged of this world. Third-world markets constitute a golden opportunity for American enterprise, large and small. At the same time, entry in such markets is a venture into uncharted territory for most U.S. firms. To reduce risks and enhance success probabilities, significant modifications of traditional marketing approaches are necessary. This article offers suggestions to aid the marketing planner in (1) identifying the most promising opportunities in third-world markets, and (2) programming appropriate market entry plans.

Using Marketing Segmentation to Find Suitable Opportunities

The vast market of the third world, sprawling over three continents and embracing half of the world's population, can be segmented by any number of dimensions, including political, economic, religious, and racial. A particularly useful method for the marketing planner is to segment LDCs on the basis of their approach to development.

In traditional economic thinking, "development" has been construed as the equivalent of mass industrialization and the attainment of gross national product and per capital income levels approaching those of such high-performance nations as the United States, Japan, and the Soviet Union. Thus, development is perceived as a uniform, linear path of economic advancement, characterized by "stages of growth" such as "take-off," "maturity," and "high mass consumption." In reality, the meaning of development is far more complex and subtle. Alternatives to the stages of growth model have been proposed and are now being pursued by various third-world countries.[1]

Table 1 illustrates how the third-world market may be segmented on the basis of four alternative development approaches, and provides examples of nations committed to each by virtue of their stated development policies.

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Table 1

A MARKET SEGMENTATION MODEL OF NATIONS
BASED ON APPROACH TO DEVELOPMENT

Approach	Cornerstones of Development Policy	Prominent Examples Current or Recent
Stages of Growth (Conventional)	Massive industrialization High technology High mass consumption External economic power and influence	Canada, France, Great Britain, Japan, Sweden, U.S.A., U.S.S.R., West Germany
Isolationism	Total economic self-sufficiency Freedom from superpower domination Fervent protection of values, mores Rigid central planning and control	Albania, Algeria, Burma, China, Cuba, Iran, Kampuchea, Uganda
Basic Needs	Redistribution of income Health, education, and welfare of masses Raising agricultural productivity Central planning and control	China, Colombia, Costa Rica, Gabon, Malawi, Mali, Peru, Sri Lanka, Tanzania
Appropriate Technology	Evolutionary progress toward local/regional self-reliance Decentralized decision making Small, simple, labor-intensive manufacture and handicraft Rural-based agro-industrial culture	Bangladesh, Bhutan, Ethiopia, Ghana, India, Indonesia, Philippines
Indigenous Modernization	"Greater piece of the action" in international economy Maximum exploitation of natural resource base Preservation of national/regional ideology and culture Selective industrialization and infrastructure modernization	Brazil, Egypt, Jordan, Kenya, Lebanon, Liberia, Mexico, Saudi Arabia, Syria, Venezuela, Zaire

Using the segmentation model in Table 1, it is possible to identify particularly promising and suitable product/service opportunities.

Isolationist Countries

Nations committed to this course believe that meaningful progress can best be achieved by drawing a "poverty curtain" around their borders, thus insulating themselves from the "evils" of the present world order.[2] The key animating characteristic of isolationist nations is their determination to achieve total self-sufficiency; and, by definition, market opportunities for foreign enterprise are severely limited. Nonetheless, no nation possesses within its borders a breadth and depth of resources to permit development beyond a comparatively primitive state in the absence of foreign trade. China, at the height of its staunchly isolationist posture, imported at various times food, grain, drugs, and industrial equipment. The key to market entry lies in identifying resources essential to the achievement of self-sufficiency that are not presently available domestically; knowledge, in all of its forms and applications, is probably the most universal of such missing resources. Possible areas of product/service opportunity include:

Raw Material Technology. Processes and equipment that will contribute to improved efficiency in the extraction and advanced processing of native raw materials (examples: mining, quarrying, harvesting, off-shore drilling).

Import Substitutes. Products, services, or processes that will enable eventual domestic manufacture of any needed consumer or industrial goods presently imported.

Network Technologies. Local linkages to any of the new super-technologies; often these can be of a low-cost/high-benefit nature, not requiring expensive equipment (examples: satellite systems for monitoring and surveying resources, education and communication satellite systems, computer modeling, biotechnologies).

Basic Needs Countries

Under a basic needs concept, industrial development is downplayed in favor of meeting the needs of the absolute poor. Accordingly, development emphasis is shifted from industrial projects to raising peasant living standards and redistributing income.[3] The relevant market in such countries is the mass market, whose needs are made clear by the fact that the great majority are undernourished, ill-clothed, ill-housed, illiterate, and lacking in proper medical care. The key to market entry lies in devising innovative and feasible solutions to the full range of basic human needs. Appropriate areas of product/service opportunity include:

Alternative Basic Need Satisfiers. Cheaper, more practical solutions to basic human needs (examples: meat substitutes, synthetic fabrics, protein-rich foods and beverages, contraceptives, generic drugs, housing alternatives, educational hardware and software).

Agricultural Productivity Boosters. Any processes and equipment that will improve agricultural output

(examples: farm implements, high-yield seeds, fertilizers, insecticides).

Affordable, Useable Consumer Conveniences and Minor "Luxuries." All types of goods and services related to modest improvements in the quality of living (examples: radios, bicycles, clothing and footwear, soaps and detergents, toys).

Development of Crafts. Equipment and processes needed to develop local craft industries (examples: handicrafts, art, repair facilities of all types).

Appropriate Technology Countries

Under an appropriate technology concept, mass industrialization is permanently repudiated in favor of the creation of an "agro-industrial" culture.[4] The idea is to create hundreds, thousands, millions of workplaces, not to maximize national output, but to maximize work opportunities instead. Although basic need satisfaction is a central concern, higher priority is given to local self-sufficiency. Needs are to be met within the context of local cultural patterns and from local resources. As in the case of India, there is likelihood of great disparities from region to region in terms of custom, religion, language, and resource base. The key to market entry is a regional subsegmentation plan based on the identification of local need patterns and the design of feasible solutions to their provision. Important areas of product/service opportunity lie in:

New Production Methods. Wholly new methods of manufacture that will permit consumer goods and industrial supplies to be produced in facilities that are small-scale, labor-intensive, low-cost, and easily maintained, and utilize local resources (examples: small-scale soap manufacturing plants in Ghana, small plants across India making building bricks out of indigenous clay, boats, egg cartons, windmills).

Simplified Consumer Goods. Use of the technique of "inventing backwards" to create new, simplified product designs to meet local needs (examples: hand-powered washing machines introduced to Mexico, simple clay stoves introduced to India to replace open fire cooking and heating).

Infrastructure Improvements. Innovative approaches to meeting energy, transportation, communication, and similar community needs (examples: windmill systems in Ethiopia, sanitary water pipes made from bamboo in Indonesia, use of dirigibles for freight movement).

Indigenous Modernization Countries

This is a development course being pursued by a number of countries whose natural resource base has suddenly produced enormous increases in national wealth, especially many oil-producing nations.[5] Countries in this category are likely to be characterized by sharp contrasts: impressive national wealth, but extreme income inequalities; sophisticated technology in key income-producing industries, but extreme backwardness elsewhere. Determined to play a strong if not decisive role in the world economy, such nations are anxious to obtain a maximum transfer of technology, capital, and goods—but without "ideological contamination." Demands for a significant share of local ownership, management, and control are likely to be high. These nations are zealously protective of their indigenous culture, and resolutely resist attempts at "Americanization" or "Russianization." Key areas of product/service opportunity typically include:

High Technology. Transfers of sophisticated technology (examples: computer hardware and software, electronics, precision instruments, plastics, machine tools, all forms of management consulting).

Major Infrastructure Projects. Processes and equipment needed for major infrastructure modernization, especially where demonstrated competence is necessary for desired international funding (examples: harbors, roads, power, irrigation, communication).

Consumer Conveniences and Luxuries. Goods and services that will improve the standard of living, but only in forms not perceived as harmful to national identity and values (examples: cosmetics, jewelry, minor and major appliances, furniture).

Underdeveloped Native Resources. Equipment and processes that will improve balance of trade by developing latent native resources (examples: handicrafts, giftware, artifacts, wines, crops).

Some firms with broad product/service mixes may be able to spot worthwhile opportunities in all of the segments described; others with relatively narrow product lines may find their best opportunities in those nations pursuing one particular development approach. Above all, creative thinking is required to identify market entry possibilities. Redefining corporate purpose may be a necessary step. International Flavors and Fragrances, a producer of flavorants and perfumes, reformulated its corporate mission to the most common denominators of taste and smell, and found a new global market opportunity in supplying flavor attractants that draw nitrogen-fixing bacteria in the soil to the root systems of food crops, thereby substituting for high-cost fertilizers. Similarly, the Green Giant Company currently has set a corporate task force to work on the creation of "strategies for profit" wherein modern food-producing technology can be adapted to the circumstances of poor countries. A further lesson comes from N.V. Philips, the Dutch electronics firm, which has established a pilot plant for the sole purpose of devising ways by which modern electronic technology can be down-scaled to suit the unique needs and circumstances of individual LDCs. Enterprise size obviously bears upon the capacity of a firm to devise innovative and profit-returning responses to third-world market needs—but perhaps much less so than corporate will and imagination.

Programming the Marketing Plan

Once market opportunities have been identified, a market entry plan must be programmed. There is a case to be made, especially in terms of cost economies, for a marketing program standardized across the globe. Coca

Cola and McDonald's have followed such a course with generally good success. Nonetheless, smaller enterprises lacking the market clout of an instantly recognizable worldwide image will find their chances of success greatly enhanced if they tailor and adapt their conventional marketing plans to suit the circumstances of each local market. In preparing such plans, the following guidelines may prove helpful.

Become Familiar with the National Development Plan

Most LDCs have promulgated an official national economic plan. This document usually may be obtained through consular offices in the United States or direct from the host country by means of contact with the appropriate government bureau, such as the Ministry of Economic Planning. In many cases, a nation's central economic plan is born of utopian thinking, and its stated goals and time frame may be found to bear only a passing resemblance to real world conditions. Nonetheless, the plan is likely to yield a wealth of useful information concerning economic conditions, government policies, and resource availability. Explicitly or implicitly, it should provide insight as to government attitudes in general toward foreign enterprise. The host country's official development plan constitutes an important set of guidelines for the preparation of the market entry program. The acceptability of the latter will be greatly enhanced to the extent that it reflects familiarity with, and compatibility with, the stated language of the development plan.

Address the Issue of Local Enterprise Participation

The entry plan should include an impact analysis relative to domestic enterprise in the host country.

For many years, the Bangladesh market has been a profitable one for several major U.S. pharmaceutical firms. These firms have resisted efforts of local entrepreneurs to participate more actively in some phase of the production and sale of needed drugs. Now, the U.S. firms face the loss of all or part of this lucrative market to a local physician who has finally succeeded in putting together a viable native organization to manufacture and distribute drugs at lower cost. Bangladesh authorities have lent enthusiastic support to the development of the internal operation.

Regardless of political orientation or choice of development mode, the animating characteristic of third-world thinking is for "a greater piece of the action." From the host country's point of view, this translates into a maximum degree of local manufacture, distribution, and management. It may not be possible or desirable in the eyes of the entering company to make such a significant direct investment in the host country's economy. Nonetheless, the market entry plan will appear far more acceptable if it seeks to demonstrate that rather than competing against local enterprise, the entry is likely to stimulate growth and participation of local business. It may be possible to incorporate some locally produced components in the finished product, or to enlist the services of local firms in the distribution and servicing function. Somewhere along the line it should always be found possible to incorporate a measure of local input into decision making. Even though the benefits to local business may be indirect rather than direct, the important point is that the entry plan reflect concern with a positive and developmental impact on native enterprise.

Anticipate Economic and Social Side Effects

Special care is needed to anticipate the host of indirect social and economic consequences that an apparently desirable product innovation may cause in an LDC market.

During the 1970s, Japanese multinationals entered the Indonesian market with a seemingly beneficial innovation: mechanical rice-hullers. Soon thereafter, a notable increase in rice production was achieved. Simultaneously, thousands of landless field workers found themselves out of work with no alternative employment available. Protest riots erupted in Jakarta. Under pressure, the government promulgated a new wave of import restrictions, including a provision that henceforth all businesses operating in Indonesia must have 51 percent or more Indonesian ownership.

A market entry plan must not be so shortsighted as to touch off a firestorm of dysfunctional consequences. Sometimes such side effects are social in nature. Nestle ignited a worldwide controversy when it introduced baby formula to third-world markets as a substitute for breast feeding. In other cases, provisions for local manufacture have created new jobs and higher incomes but also new pressures on family structure. Job training may expand intellectual horizons, bringing about new demands for other educational opportunities, sanitation, running water, electricity, better nutrition, family planning, and similar "luxuries" and conveniences.

The entering firm, seeking acceptable profit return, cannot be expected to solve such a broad range of problems with its own resources. But it can recognize the likelihood of their occurrence and demonstrate a concern for ameliorating if not eliminating them. Throughout the third world, many nonprofit, nongovernmental organizations work quietly to solve the economic, social, and cultural problems engendered by rapid technological change. The services of such agencies can be coordinated with a market entry plan, by working through the appropriate government bureau of the host country and with the assistance of the local American embassy.

Adopt a "Total Product" Concept

It is especially important in third-world marketing for a firm to recognize that it is marketing more than a product or service; it is likely to be marketing ideas, images, and perhaps fundamental change in behavior. In a very real sense, it is marketing itself—to a government and a people who may understandably regard it in the beginning with some measure of distrust.

Traditional promotional approaches may need to be modified in many respects. For example, emphasis may

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MEMPHIS HOUSEHOLD CONSUMPTION PATTERNS: A BUDGET STUDY

*Richard D. Evans**

How reliable are national studies of consumer behavior in local business applications? Often a regional business researcher may obtain an existing national study of spending patterns quickly and at a reasonable price. If regional consumers behave according to national norms and the area is representative of the nation as a whole, no great problems will arise when local business projects are planned according to a national consumer study. On the other hand, if there is reason to believe that differences in the region's mix of households are significant or that local consumers behave differently than their counterparts elsewhere, then sizable errors are possible. Products may be successful in the local region despite having limited potential nationally; or local consumers may be cool to a business policy that, according to a national study, seems to hold great promise.

As a marketing area, the Mid-South region is in some respects unique. Memphis is atypical in its racial mix, having had a large black population for years. A failure to adjust a national market study for the racial mix of a city may lead to unreliable conclusions. The educational level of adults in the Memphis area is, on the average, lower than the national norm, and the distribution of income has a different pattern than the national distribution. A national study of a good or service that is sensitive to income and education will not be valid for Memphis unless some adjustment is made. Finally, Memphis is atypical in its mix of single-family homes and other types of abode, with a larger proportion of single-family homes and a smaller proportion of apartments than other cities. Since consumption patterns vary by type of abode, the use of a national market study may cause planning errors at the local level.

This article reports the results of a study of Memphis household budget patterns. Based on the responses to a large mail survey, the study relates income, size of family, type of abode, race, and sex to spending for housing, food, household utilities and operations, transportation, clothing, medical and dental care, personal care and entertainment, insurance, and saving. The survey forms the base of a continuing service of the Memphis State University Bureau of Business and Economic Research, the Memphis Household Research Panel. Business, government, and academic sponsors of the service may access the data and conduct follow-up, detailed surveys by contacting the Bureau.[1]

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A Survey of Memphis Households

To collect the data needed for an analysis of Memphis household budget patterns, the questionnaire reproduced in Figure 1 was mailed to randomly selected Memphis households in August 1981. More than 2,000 questionnaires were mailed, with a cover letter inviting recipients to join the Memphis Household Research Panel and respond to monthly questionnaires of this type. The 280 responses represented a 14 percent response rate, within the anticipated range given the detailed and personal nature of the questionnaire. The responses form the base for the demographic analysis of budgetary data that follows.

Figure 1

MEMPHIS HOUSEHOLD RESEARCH PANEL QUESTIONNAIRE

The following questions will be used to make the Memphis Household Research Panel representative of the Memphis area in terms of race, sex and standard of living.

The head of the household is: MALE FEMALE (please circle one)
The head of the household is: BLACK WHITE OTHER (please circle one)
How many people live in the household? _____
The household is (please circle one):

AN APARTMENT	A DUPLEX
A SINGLE-FAMILY HOUSE	A MOBILE HOME
A CONDOMINIUM	A HOTEL
A LONG-TERM CARE FACILITY	OTHER

Before taxes, the household income from all sources this year is in the range of:

OVER $35,000	30,000 to $35,000	$25,000 to $29,999	20,000 to 24,999
$15,000 to 19,999	$10,000 to $14,999	$5,000 to $9,999	LESS THAN $5,000

The following questions will be used to compare Memphis area spending patterns with those in the rest of the United States.

Please estimate your spending this month and next month in the following areas:

THIS MONTH	NEXT MONTH	
$ _____	$ _____	HOUSING (Include rent, mortgage, home insurance and taxes.)
$ _____	$ _____	FOOD (Both at home and away.)
$ _____	$ _____	HOUSEHOLD OPERATIONS AND UTILITIES, HOME FURNISHINGS
$ _____	$ _____	TRANSPORTATION (Include gas, oil and auto repairs, auto payments, bus and cab fares, parking, and insurance.)
$ _____	$ _____	CLOTHING
$ _____	$ _____	MEDICAL CARE (Include medical insurance, drugs, fees to physicians and dentists, and other costs.)
$ _____	$ _____	PERSONAL CARE, GIFTS AND ENTERTAINMENT
$ _____	$ _____	LIFE INSURANCE
$ _____	$ _____	SAVING
$ _____	$ _____	SOCIAL SECURITY TAXES, INCOME TAXES
$ _____	$ _____	TOTAL FAMILY INCOME BEFORE TAXES FOR THE MONTH

As shown in Table 1, 71.1 percent of the sample households are headed by males. The sample's proportion of blacks (17.5 percent) is much less than the city's actual

proportion, 42 percent. This underrepresentation can be corrected by directing future panel invitations to blacks and by selectively including future volunteers for panel service. Until the proportions in the panel match the population proportions, statistical controls on the race variable are being used.

Table 1
CHARACTERISTICS OF MEMPHIS HOUSEHOLDS SURVEYED
AUGUST 1981

Characteristics	Number	Percent
Sex of head of household:		
Male	199	71.1
Female	81	28.9
Race of head of household:		
Black	49	17.5
White	229	81.8
Other	2	0.7
Size of household:		
One person	57	20.4
Two persons	82	29.3
Three persons	63	22.5
Four persons	50	17.9
Five persons	20	7.1
Six persons	6	2.1
Seven persons	0	0.0
Eight persons	2	0.7
Type of residence:		
Apartment	36	12.9
Duplex	20	7.2
Single-family home	213	76.3
Mobile home	1	0.4
Condominium	8	2.9
Other	1	0.4
Annual income:		
Over $35,000	53	18.9
$30,000 to $35,000	38	13.6
$25,000 to $29,999	31	11.1
$20,000 to $24,999	38	13.6
$15,000 to $19,999	40	14.3
$10,000 to $14,999	44	15.7
$ 5,000 to $ 9,999	25	8.9
Less than $5,000	11	3.9

Only eight responding households (2.8 percent) have six or more members. Single-person households represent 20.4 percent of the sample, while two- and three-person households represent 29.3 and 22.5 percent, respectively. The average household has 2.72 members; the median is 2.02 persons.

The predominant type of home is the single-family home, accounting for 76.3 percent of the sample. Apartment dwellers account for 12.9 percent of the respondents, while 7.2 percent listed duplex as their type of residence.

Median twelve-month pre-tax income from all household sources is $22,647. Incomes below $5,000 account for 3.9 percent of the sample, while 32.5 percent reported incomes of $30,000 or higher.

Memphis Household Consumption Patterns

Spending on housing, including rent, mortgage payments, home insurance, and taxes, ranged in the sample from zero to $1,100 for the month of August 1981. As reported in Table 2, average spending was $284 for housing. For food—both at home and away—the households spent an average of $249, while household utilities and operations cost an average of almost $164 in this summer month. August transportation averaged just less than $202, which includes gas and oil, auto repairs, auto payments, bus and cab fares, parking, and auto insurance.

Table 2
AVERAGE MEMPHIS HOUSEHOLD EXPENDITURES
BY SPENDING CATEGORY
AUGUST 1981

Housing (including rent, mortgage, home insurance and taxes)	$ 284.18
Food (both at home and away)	$ 249.37
Household operations and utilities, home furnishings	$ 163.52
Transportation (including gas, oil and auto repairs, auto payments, bus and cab fares, parking and insurance)	$ 201.53
Clothing	$ 74.06
Medical care (including medical insurance, drugs, fees to physicians and dentists, and other costs)	$ 93.55
Personal care, gifts, and entertainment	$ 83.70
Life insurance	$ 42.31
Saving	$ 121.39
Social security taxes, income taxes	$ 364.77

Household expenditures for clothing averaged $74 in August. Medical care spending ranged from zero to $2,500, averaging $95. Included in medical care expenditures are medical insurance, drugs, fees to physicians and dentists, and other medical costs. Life insurance premiums averaged $42, although most of the households paid less than that much. Average spending for personal care and entertainment was just less than $84, another figure that is pulled up by a few high observations, which ranged up to $800

Income taxes and social security taxes averaged almost $365 in August 1981. With the average monthly income being $1,943, taxes accounted for an 18.8 percent share of the household before-tax budget. Saving ranged from zero to $1,600, averaging $121.

Variations in Household Spending Patterns

To explain variations in consumption spending, multiple regression analysis may be used to statistically account for the effect of the demographic variables collected for the Panel.[2] Increases in income were associated with increases in all categories of spending, as would be predicted by economic theory. For example, a $100 increase in monthly income was associated with a $6.93 increase in spending on housing. For all other types of spending, income was a highly significant explanatory variable and positively associated with expenditures, meaning that higher-income families spend more than do lower-income families in each spending category.

As to the effect of family size, with great statistical reliability it may be concluded that larger households spend more on housing, food, and clothing but do less saving. For example, each added member of the household was associated with $20.39 added housing costs. Saving per month, however, fell by $31.59 for each added member of the household.

A significant relationship was also found to exist between type of abode and expenditures for housing,

saving, and utilities and operations. On the average, households with single-family homes spent $35.28 less per month on housing than was observed for the rest of the sample. Saving for single-family home dwellers averaged $61.16 more per month than for respondents living in other types of abode. This relation between abode and saving is probably related to the effect of the decline of real housing costs, with inflation of wages causing an increase in funds available for saving. These statistically significant results, however, do not mean that a family could spend less and save more by moving to a single-family home from an apartment. The statistics are, in this case, biased by the fact that many single-family residences were purchased years ago at unin.lated prices and under low mortgage rates. Housing costs for many of these Panel members have not changed with inflation, while renters have seen their housing costs increase with inflation. Households in single-family residences spent an average of $77.77 more per month for utilities and operations than did households living in other types of abode.

An evaluation of spending differences related to race showed race to be significantly related to spending for housing, food, and clothing. White households spent an average of $55.65 more per month on housing than black households. Monthly food expenditures averaged $37.82 more for the white households. Black households, however, spent an average of $27.48 more on clothing than did white households. In other spending categories, differences in expenditures according to race were not significant.

Analysis of the Panel data indicated that the only significant relationship between spending and sex of head of household was in the category of transportation. Female-headed households spent less on transportation, averaging $64.55 less per month than male-headed households. This exception is perhaps due to the smaller average family size for female-headed households and the decreased likelihood of the family being a two-car family.

As was anticipated from other studies, female- and black-headed households in this sample had lower average incomes than male- and white-headed households. Race, sex, and income are not statistically independent, due to, if nothing else, racial and sexual income discrimination. This results in the econometric problem known as multicolinearity, a problem that is common in business and economic applications of regression analysis. Because of this problem, measures of the sensitivity of spending to changes in any of the affected variables are not reliable.

To counter the effect of multicolinearity, a separate set of regressions was performed, relating income, family size, type of abode, race, and sex to the after-tax budget proportion of each spending category. After adjustments were made for differences in income by dividing each reported spending level by the household's after-tax budget, variations in the proportion of the budget allocated to different uses could be studied.

Many national studies have concluded that expenditures for housing decrease as income increases. In this Memphis sample, however, the budget proportion spent on housing did not decrease significantly as income increased. In other words, in Memphis housing expenditures are roughly constant as a proportion of the budget.

Expenditures for transportation, clothing, medical care, and personal care and entertainment were also fairly constant as a proportion of the household budget as income increased. The Panel responses indicated, however, that the proportion spent on food and utilities and operations decreased significantly as income increased, while the saving and insurance allocations increased with income.

It may also be concluded that Memphis housing expenditures are roughly constant as a proportion of the budget as family size increases. Larger family size is positively related to the proportion of the budget allocated to food, however, with each added person in the household raising the proportion of the budget spent on food by 2.8 percent. The proportion of the budget spent on personal care and entertainment and on saving decreased as the size of the household increased. Relationships between family size and proportion of budget allocated to the other spending categories were found to be insignificant.

Dwelling in a single-family home reduces the share of the budget spent on housing and food but increases the share spent on utilities and operations. Households living in single-family residences allocated 5.0 percent more of their budgets to utilities and operations, but spent 3.5 percent less on food and 4.8 percent less on housing. Residence in a single-family home is also associated with a sizable 3.9 percent increase in the saving share. The results reported above, indicating that housing costs and saving vary with type of abode, are thus reflected in budget proportions as well.

The relationship between type of abode and proportion of the budget allocated to other spending categories was not significant, with the exception of a positive relationship between medical care proportion and single-family residence.

Households headed by blacks allocated a significantly larger share of the budget (3.1 percent) to clothing and to utilities and operations than did white-headed households. Whites, however, spent almost 5.0 percent more of the household budget for housing.

The sex of the head of the household also had an effect on the proportion of the budget spent on certain categories. Female-headed households differed significantly from male-headed households by allocating larger shares of their budgets to utilities and operations (3.5 percent more) and medical care (2.8 percent more). They spent a smaller proportion of the household budget for transportation (4.3 percent less) and insurance (1.1 percent less) than did male-headed households.

Conclusions

The importance of the income variable in explaining or predicting spending levels and patterns has been reiterated by this study. For Mid-South business researchers, the local income level and its distribution are key considerations in predicting sales within a spending category.

Similarly, apartment dwellers and single-family home residents show important differences in spending and saving patterns that need to be accounted for in many research situations. The Memphis Household Research Panel, with data already available on income, size of family, type of residence, race, and sex, represents a valuable resource for further research that is custom-designed for the Mid-South area.

[1]The Memphis Household Research Panel is a service of the Memphis State University Bureau of Business and Economic Research, The Fogelman College of Business and Economics, Memphis, Tennessee.

[2]Access to this data and complete regression results will be granted by the Memphis State University Bureau of Business and Economic Research for further study by business, government, and academic researchers. However, since Panel volunteers were promised privacy, names and addresses of panel members will not be provided. Researchers may ask the Panel members follow-up questions by using the existing data on a household-by-household basis through an identification code that guarantees confidentiality.

(Continued from page 6)

need to be shifted from a "rifle" approach of brand stimulation to a "shotgun" approach of building primary demand for a product that is beneficial but nontraditional (e.g., high-protein foods and beverages). Thought may be necessary as to how personal influence channels may be brought to bear as an aid to achieving necessary behavior modification. Elements of the marketing mix such as advertising, brand names, and packaging may have to be adjusted to fit native values and mores; moreover, such variables may require further modification within an LDC market to fit local and regional differences in custom and language. Subtle promotional approaches may have to be devised to "massage" strong feelings of nationalism, self-reliance, and uniqueness.

Careful thought must be given to how a product or service will fit into the local market. Technological products have failed in LDC markets because of a seller's failure to provide necessary customer education and training. Regular market feedback will probably be desirable so that user problems can be recognized and handled in a timely fashion; the difficulty of establishing such two-way communication systems may be compounded by high levels of illiteracy. If eventual servicing needs can be expected, arrangements must be made for establishing service contact points, assuring availability of replacement parts, and training service personnel.

Thorough pre-entry assessment of each proposed LDC market will aid the marketing planner in programming such necessary modifications into the entry plan.

Taking the First Step

Firms interested in further exploration of third-world marketing opportunities will find that numerous additional sources of information are available. The U.S. Department of State will furnish *Background Notes* giving detailed profiles of individual countries. The Organization for Economic Cooperation and Development (OECD) offers a wealth of material in published form. Trade associations can be helpful. The U.S. Foreign Service cooperates in the development of business opportunities abroad through commerical attaches in American embassies.

The third world constitutes the real growth market of the future. Multinational corporations and smaller firms of other nations can be expected to respond to burgeoning opportunities. American enterprises, large and small, should take the first step in a similar undertaking.

[1]For a sample of the literature pertaining to new ideas about development, see P. T. Bauer, *Dissent on Development: Studies and Debates in Developmental Economics* (Cambridge, Mass.: Harvard University Press, 1972); H. T. Oshina, "New Directions in Developmental Strategies," *Economic Development and Cultural Change* 25 (1977):555-79; C. R. Pinches, "Economic Development: The Need for an Alternative Approach," *Economic Development and Cultural Change* 25 (1977):139-46; P. Streeten, "Changing Perceptions of Development," *Finance and Development* 14 (1977):14-16.

[2]Advocacy of this new view may be found in S. Amin, *Acculturation on a World Scale: A Critique of the Theory of Underdevelopment* (New York: Monthly Review Press, 1974); C. Furtado, *Development and Underdevelopment* (Berkeley: University of California Press, 1964); A. G. Frank, *Capitalism and Underdevelopment in Latin America: Historical Studies of Chile and Brazil* (New York: Monthly Review Press, 1967).

[3]For further elaboration of this approach, see W. Beckerman, "Some Reflections on Redistribution with Growth," *World Development*, 5 (1977): 337-49; D. P. Ghai *et al.*, *The Basic Needs Approach to Development* (Geneva: International Labour Organization, 1977); F. Lisk, "Conventional Development Strategies and Basic Need Fulfillment," *International Labour Review* 68 (1977):175-91.

[4]The late British economist E. F. Schumacher was the leading advocate of this approach; see especially E. F. Schumacher, *Small Is Beautiful* (New York: Harper & Row, 1973).

[5]Advocacy of a development posture of this nature may be found in W. M. Corden, *The Theory of Protection* (Oxford: Clarendon Press, 1971); E. Arghiri, *Unequal Exchange: A Study of the Imperialism of Trade* (New York: Monthly Review Press, 1972); P. Jalle, *The Pillage of the Third World* (New York: Monthly Review Press, 1968).

ASSESSMENT CENTERS: PROCEED WITH CAUTION

*Ronald W. Clement and Claudia L. Rawlins**

Despite the somewhat misleading name, an assessment center is not a place, but a method of assessing managerial potential. Although it may be used to identify developmental needs of employees, it is most often used to identify candidates for managerial positions. During the assessment center, which may last from two to five days, several candidates are evaluated by trained assessors using several evaluation exercises. Most frequently there are six candidates, or assessees, and four assessors, who often are second-level managers trained to assess candidate performance. The evaluation exercises simulate the problems and challenges of the managerial positions to which the candidates aspire. Both individual and group exercises are used. Typical individual exercises include interviews conducted by the assessors and an in-basket to measure decision-making ability; often-used group exercises include business games and the leaderless group discussion, used to measure oral communications.

More than 2,000 companies have used assessment centers to help select future managers and to diagnose developmental needs.[1] Judging from the literature on assessment centers, one might be tempted to conclude that this technique is the answer to all of our problems in identifying managerial talent. First of all, several researchers have reported evidence that assessment centers are more valid than traditional selection devices.[2] Second, the assessment center approach to selection has been approved by the Equal Employment Opportunity Commission (EEOC) for use in affirmative action programs.[3] Third, although assessment centers have been used primarily in large organizations, such as AT&T and Sears, a convincing case was recently made for the use of assessment centers by small organizations as well.[4]

However, the assessment center approach to selection does have some potential limitations in its current stage of development. These limitations are concerned with problems of validity, cost, and ethics, and they must be understood in order to be minimized by any organization planning to implement the assessment center concept.

Problems of Validity

At first glance, the evidence does seem to show that the assessment center approach to selection is highly valid—that is, that assessment centers *do* predict those candidates who will perform successfully in managerial positions. This validity, however, is contingent upon three conditions:

1. The degree to which the assessment center is administered in a standardized (i.e., reliable) manner
2. The indicators of managerial success upon which the center is based
3. The nature of the organization—its policies, practices, etc.

Each of these conditions is further examined below.

A Need for Standardization

Without reliability there can be no validity. For example, consider the situation in which two raters cannot agree on the performance rating to be given to an assessment center candidate. Without interrater reliability, it cannot be determined which (if either) of the two ratings is valid.

For this reason, it is important that an assessment center be administered in a standardized manner.[5] That is, all candidates assessed for a given managerial level or position must be treated alike. There are two major areas of concern here: the exercises to which the candidates are exposed and the managers, or assessors, performing the assessment.

Consider first the exercises. All candidates must be exposed to the same ones. Further, in the administration of the exercises, all candidates must receive the same instructions and time limits. In exercises where assigned roles are used (e.g., a leaderless group discussion), the roles must all be of the same degree of difficulty. Finally, the order in which the exercises are presented must be the same.

It may not be possible to meet all of these conditions in the administration of the exercises; however, to the extent these conditions are not met, one or more candidates may receive a differential advantage. For example, one study found that candidates who had been exposed to a leadership exercise early in an assessment center performed less effectively on this exercise than candidates who had encountered the same exercise late in the same assessment center.[6] Apparently the latter heard about the nature of the exercise from the former, and this forewarning led to improved performance. In other words, the lack of standardization produced a differential advantage for one of the two groups.

Consider next the assessors. These individuals must be both objective and consistent in their evaluation of the performance of candidates.

First, they must evaluate each candidate only on his or her performance on the exercises; candidate behavior that is unrelated to the exercises—particularly prior job performance—must be ignored. Accordingly, it is wise to

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use assessors who are unfamiliar with the candidates and their prior organizational performance. For small organizations this presents a real problem.

Second, assessors must focus on job-related behaviors—those that a given exercise has been proven to test. For example, if an in-basket has been included for the purpose of measuring administrative ability, assessors should not attempt to use it to rate analytical ability.

Third, assessors must attempt to avoid the problems found so often in the typical performance appraisal. These include:

1. Halo effect—rating a candidate favorably on all factors because the candidate appears strong on one factor
2. Central tendency—the tendency to rate all candidates either average or just above average
3. Recent behavior bias—the tendency to weight recent performance more heavily than earlier performance
4. Personal bias—the tendency for the evaluator's personal preferences to bias the rating

One to two days of assessor training may be required to provide the necessary expertise. It has been suggested that assessors should be certified after training but before assessing any candidates. This certification process could be based on the very foundation of the assessment center—that is, a simulation of the situation required of an assessor during assessment. Only those who pass this "test" would be permitted to assess. For example, the simulation could involve assessing a videotape replay of a candidate's performance during one or more exercises.

Such training could increase considerably the cost of operating the assessment center. However, the increase in reliability and validity may be well worth the added cost. Further, the training would probably also improve the manager-assessor's ability to appraise the performance of subordinates in the normal job setting.

Personal bias is a particularly troublesome problem. Not only can it lower the validity of the assessment center, it can also lead to costly charges of discrimination. To further provide that this problem is minimized, it is imperative that the race and sex of the assessors should reflect the demographic makeup of the work force.

Questionable Indicators of Managerial Success

Nearly all studies of the validity of assessment centers have used questionable indicators of managerial success.[7] For example, the "success" of candidates promoted to managerial positions has often been measured in terms of number of promotions received or level of salary achieved within a few years after the assessment center. Such indicators of managerial success may have less to do with managerial success than with the ability to "play the game" (e.g., do what the boss likes rather than what is best).

Further, in many of those studies the persons making the promotional decisions had access to the assessment ratings made on the assessees.[8] The use of assessment center results to make promotion decisions invalidates the use of that promotion data to evaluate the assessment center.

It has even been suggested that obtained assessment center validity is merely a case of managers (as assessment center staff) predicting or anticipating how other managers (their colleagues in the organization) will react to a particular candidate in making promotion decisions. This means that the assessors could be attempting to identify those candidates that management will like rather than those who will perform effectively as managers. Clearly, being liked (or playing the game) is not the same as being effective. The most valid measure of managerial success is the candidate's ability to achieve organizational objectives such as profits, sales, or productivity.

The moral is that any organization planning to implement an assessment center for the identification of managerial talent must also plan to test the validity of each assessment center exercise against objective indicators of managerial success. It may be necessary to perform job analyses to determine the appropriate objective measures. In other words, it must be determined what specific job behaviors differentiate effective from ineffective performers. Questionable indicators such as salary progress or number of promotions must be avoided.

Nature of the Organization

Research has been performed on the validity of assessment centers ever since 1956. Furthermore, assessment centers have been used in a large number of organizations in both the private and public sectors. One might expect, therefore, that it would be easy to determine whether the validity of the assessment center technique depends upon the nature of the organization using it.

For example, are assessment centers more likely to "work" in democratic versus autocratic organizations? In tall versus flat organization structures? In public versus private enterprise?

Researchers do not know the answers to questions such as these, and there are two reasons why this is so. First, the research on assessment centers has been performed in very few organizations, the majority of which are large corporations. Second, only successes have been reported; as is true with other areas of research, journal space is not allocated to studies yielding negative results. As a consequence, little is known about the circumstances under which assessment centers fail and the reasons why organizations decide to discontinue the operation of an assessment center.

Even if it could be shown that the assessment center technique was valid for a wide variety of organizations, each organization would still have to design and validate an assessment center to suit its own unique needs. This statement is as true for assessment centers as it is for any other selection device. With the continuing demand for equal employment opportunities, the use of any unproven selection device is foolhardy.

Problems of Cost

The investment required to operate an assessment center has largely been ignored in the literature. Because the investment can be quite large, and because the desired return (i.e., a valid assessment center) is never guaranteed, it is imperative that the organization carefully consider the outlay expected before proceeding to develop the desired center.

Probably the largest initial outlay is for the assistance of a professional consultant experienced in the development and operation of an assessment center. The investment required for such expertise depends upon two factors: (1) the reputation of the consultant, and (2) the length of time over which the consultant's services are retained. Despite the higher cost, it is wise to select a consultant with a proven reputation for implementing successful assessment centers; evidence of this success is certainly available. It is also wise to retain this individual's services until the "bugs" are out of the system and the organization has acquired the expertise necessary for operating its assessment center.

Other costs to be considered include the salaries of the managers who serve as assessors, the candidates to be assessed, and the full-time staff to support the center; the costs of the facilities and exercises; and the cost to train assessors. Table 1 shows estimated cost figures for an assessment center that processes 550 assessees annually. This particular two-day assessment center is used to identify candidates for first-level supervision. It operates for 46 weeks each year, with two sessions per week (i.e., 92 per year). The exercises include, among others, an in-basket to test decision-making ability, a business game to measure organizing ability, a test of writing ability, a leaderless group discussion to measure ability to orally communicate, and a personal interview.

Table 1

INVESTMENT TO PROCESS 550 CANDIDATES ANNUALLY THROUGH A TYPICAL ASSESSMENT CENTER[1]

Item	Annual Cost	Explanation
Salaries:		
Assessors	$ 84,900	4 second-level managers, at $30,000 annual salaries, to assess 4 days each week for 46 weeks.
Assessees	63,700	6 candidates, at $15,000 annual salaries, to be assessed 4 days each week for 46 weeks.
Support staff	40,000	1 administrator, 1 secretary.
Rental cost of facilities	59,800	92 assessment sessions per year at $650 per session.
Cost of exercises	5,500	92 sessions x 6 assessees x $10 per package.
Cost to train assessors	4,000	5 every 9 months at $600.
Total Annual Cost	$257,900	

[1]Estimates based on the operation of an assessment center by a major corporation in Phoenix, Arizona. The costs of professional consulting services are not estimated because they vary greatly across situations.

Four second-level managers serve a nine-month term as assessors, with a fifth serving as an alternate to cover for vacations, illness, etc. These assessors receive one week of training in which they try out the center exercises, receive feedback on their performance, and learn how to rate candidate performance on each exercise.

Six candidates are assessed at each of the two-day sessions, each of which occupies ten rooms at a nearby hotel. The full-time assessment center staff includes one director and one secretary. In short, this assessment center is typical of those used to identify talent for first-level supervision.

As Table 1 clearly shows, the investment required to operate even a two-day center can be quite large.[9] On the other hand, if the assessment center does a better job of identifying managerial potential than do traditional selection devices, the investment may be worth making.

Ethical Problems

Another issue seldom mentioned in the literature involves the ethical problems that may arise in the operation of an assessment center. For the most part, these problems relate to the way in which candidates are treated--during both the nomination and feedback processes.

Ethics and the Nomination Process

The method of nominating candidates for the assessment center obviously should provide that the needs of the organization are met. For example, if the primary objective of the assessment center is to identify future managers, then the nominating process should screen out employees with little or no advancement potential; it should be unnecessary to assess these employees.

However, the nominating process should also provide that employees are given fair treatment, and this is not always the case. More often than not, employees are nominated by their superiors. This approach would be fine if the superiors' choices were always based upon objective, job-related criteria; under such circumstances, only the better employees would be nominated, so assessment center time would not be wasted on employees with little or no potential. Unfortunately, superiors often fail to make objective, job-related decisions.

The nomination of candidates for the assessment center is fraught with the same types of human error as the typical performance review—that is, halo effect, recent behavior bias, etc., often come into play. Apart from these unintentional forms of human error, there are intentionally biased personnel decisions. For example, a superior can hoard more effective performers—at least in the short run—simply by giving them unfairly low ratings or failing to recommend them for promotion or transfer. Bias with regard to race and sex also is likely to occur. Because of such problems, it is probably not safe to assume that the superior, acting alone, will nominate candidates according to objective, job-related criteria.

An approach used less frequently is self-nomination. This approach is fairer to the employees than nomination by the superior in that any employee who feels ready for promotion has the opportunity to be assessed. Unfor-

tunately, this approach is not fair to the organization, since considerable assessment center time can be wasted on candidates with little or no potential for advancement.

Perhaps the best approach is to use a key assessment center concept—that of multiple raters—in the nomination of candidates. The first step involves self-nomination in order to avoid the problems inherent in nomination by the superior (i.e., intentional and unintentional human error). The second step involves what has been called a hybrid multitrait-multirater analysis.[10] Several raters analyze each of several dimensions, or traits, of the employee's performance, each rater focusing only on those dimensions with which the rater is familiar. For example, the employee's potential for nomination can be examined by the immediate superior, the second-level superior, and a peer of the immediate superior, depending upon the extent to which each has become familiar with the employee's past performance. This "board of nominators" is more likely than either the employee or the immediate superior, acting alone, to focus upon objective, job-related performance measures.

One final comment about the treatment of the employee during nomination concerns the information about the assessment process itself that is provided to the candidate. It has been suggested that the candidate should be made completely aware of the purpose of the center and the process (e.g., exercises and feedback) to which he/she will be exposed. Obviously this ensures that no candidate has a relative advantage concerning knowledge about the center. More important as an ethical issue, it ensures that each candidate is aware of the consequences of participating.

For example, it should probably be made clear to the candidate that good performance does not guarantee success in the organization, nor does poor performance signal failure. Performance in an assessment center has been found to be only one of several inputs used by organizations to determine those ready for promotion.[11] In fact, the two promotional criteria considered most important were found to be the recommendation of the employee's superior and performance appraisal evaluations. Further, although the primary purpose of the center may be to identify those ready for promotion, a secondary purpose should be to identify developmental needs of candidates. In other words, there need be no "losers."[12]

Ethics and the Feedback Process

Again, the concern here is that the employee will be treated fairly while the needs of both the organization and the employee are met. The key issues of concern are the individuals involved in the feedback process and the manner in which feedback is to be given.

Regarding the former, only the assessors and assessees should be involved in the initial feedback process. First, it is only fair that the candidate should receive feedback on his/her performance before any other individual, including the immediate superior, receives such information. The candidate may disagree with some of the feedback, and any disagreements should be resolved before management receives a report on the candidate's performance. Each candidate should also be reminded of the consequences of participation during the feedback process.

Second, the feedback to the candidate should be given by one or more of the assessors, because these are the only individuals to have directly observed the candidate's performance; consequently, they also are in the best position to thoroughly discuss the feedback with the candidate.

Obviously, some form of report on the candidate's performance should eventually go to management; otherwise, the needs of the organization for identifying managerial talent will not be met. Fair treatment of the candidate, however, should be given higher priority than speedy reporting. Should these arguments remain unconvincing on ethical grounds, the emphasis on equal employment opportunities may make them convincing on legal grounds.

Conclusion

The assessment center technique may well be an excellent approach to the identification of managerial talent. The purpose of this article was not to claim otherwise, but merely to point out some of the potential problems that should be considered by any organization planning to implement this selection technique. Problems in operating an assessment center can be minimized by means of a proper validation procedure, a careful consideration of the costs involved, and fair treatment of the candidates to be assessed.

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[1]Treadway C. Parker, "Assessment Centers: A Statistical Study," *Personnel Administrator*, February 1980, pp. 65-67.

[2]D. W. Bray, "The Assessment Center Method," in R. L. Craig (ed.), *Training and Development Handbook: A Guide to Human Resource Development* (New York: McGraw-Hill, 1976).

[3]S. D. Norton, "The Empirical and Content Validity of Assessment Centers vs. Traditional Methods for Predicting Managerial Success," *Academy of Management Review*, July 1977, pp. 442-53.

[4]Seymour Adler, "Using Assessment Centers in Smaller Organizations," *Personnel Journal*, September 1978, pp. 484-87.

[5]S. L. Cohen, "How Well Standardized Is Your Organization's Assessment Center?" *Personnel Administrator*, December 1978, pp.41-51.

[6]S. L. Cohen and Larry Sands, "The Effects of Order of Exercise Presentation on Assessment Center Performance: One Standardization Concern," *Personnel Psychology*, Spring 1978, pp. 35-46.

[7]R. J. Klimoski and W. J. Strickland, "Assessment Centers—Valid or Merely Prescient?" *Personnel Psychology*, Autumn 1977, pp. 353-61.

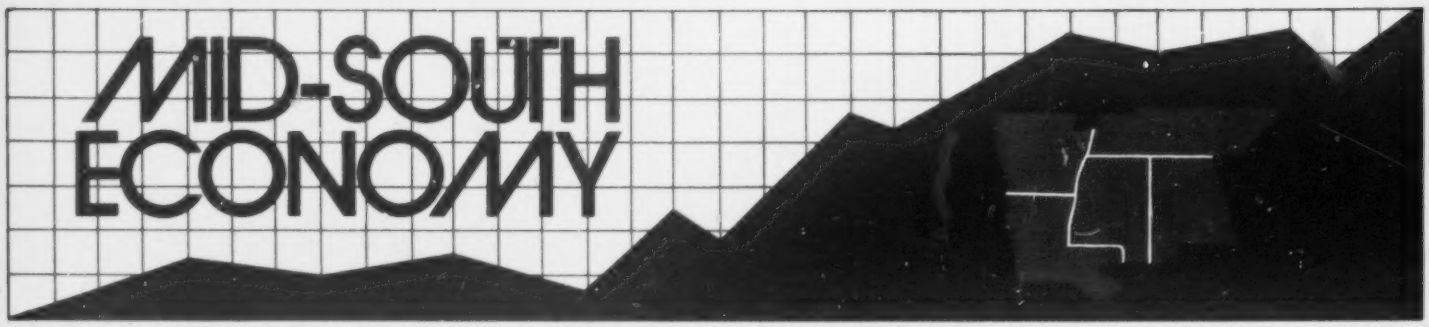
[8]C. W. Millard and Sheldon Pinsky, "Assessing the Assessment Center," *Personnel Administrator*, May 1980, pp. 85-88.

[9]It should be pointed out, however, that the total annual cost specified in Table 1 is largely a result of two factors: the ratio of four assessors to six assessees, and the frequency with which assessment sessions are held (i.e., 92 each year). To the extent that an organization can reduce the ratio of assessors to assessees and/or the frequency of assessment sessions, the total annual cost will decrease.

[10]W. F. Cascio, *Applied Psychology in Personnel Management* (Reston, Va.: Reston Publishing, 1978).

[11]L. D. Alexander, "An Exploratory Study of the Utilization of Assessment Center Results," *Academy of Management Journal*, March 1979, pp. 152-57.

[12]Leland C. Nichols and Joseph Hudson, "Dual-role Assessment Center: Selection and Development," *Personnel Journal*, May 1981, pp. 380-86.



BUREAU OF BUSINESS & ECONOMIC RESEARCH THE FOGELMAN COLLEGE OF BUSINESS AND ECONOMICS MEMPHIS STATE UNIVERSITY

STATISTICAL SUPPLEMENT

THE MID-SOUTH ECONOMY

The Mid-South economy enters 1982 facing continued high interest rates, a depressed construction industry, low commodity prices, and a softening labor market. Mid-South sales tax collections have generally slowed, reflecting, perhaps, a post-holiday sales slump and a "wait and see" attitude on the part of consumers. The index for prices received by farmers in the Southeast section of the nation was 8.7 percent lower in January 1982 compared to 1981. However, personal income in the Mid-South managed to grow 12.3 percent in the third quarter of 1981 compared to the third quarter of 1980, outpacing the national increase of 11.9 percent.

Unemployment continues to be of major concern throughout the Mid-South, with most states experiencing their highest levels of unemployment since the pre-World War II period. Seasonal layoffs, a severe winter, and the inability of a sluggish economy to absorb a growing labor force have had a negative impact on employment. This is pointed up by the fact that, on the national level for January 1982, 34.2 percent of the unemployment problem is attributable to the number of new entrants and reentrants into the labor force, with an additional 9.1 percent due to people quitting their jobs. By occupation, the largest percentage of unemployed are non-farm laborers, while by industry the single largest group is construction workers at 18.7 percent.

Most economic observers continue to look for improvements to begin by mid-year, which would mirror last year's performance, with interest rates, commodity prices, and ultimately consumer spending dictating the future course of the Mid-South economy in 1982.

Labor

The Mid-South civilian labor force totaled 7,677,300 in January 1982, with the number of unemployed persons reaching 911,349, or 11.9 percent of the Mid-South work force. All of the Mid-South states continued to register substantial increases in the number of unemployed from the levels of a year ago, with Alabama the hardest hit. Arkansas registered significant declines in employment across the board along with Mississippi and Tennessee. Louisiana and Alabama were the only Mid-South states to register positive gains in non-manufacturing employment.

Manufacturing employment continues, as expected, to experience declines from the level of a year ago. This is generally reflected by the 3.1 percent decline in manufacturing employment, no change in average weekly earnings, and a 7.8 percent drop in average weekly hours for the nation's production workers.

The general consensus for improvements in manufacturing employment is that a lowering of the inflation rate will bolster consumer spending, which will reduce inventories, causing manufacturers to step up production.

Construction

The dollar value of construction contracts awarded in the Mid-South Region 6 totaled $485.4 million in February 1982, down 39.1 percent from last February. Residential construction declined 26.2 percent from a year ago, with 31.1 percent fewer dwelling units started for the first two months of 1982 versus 1981.

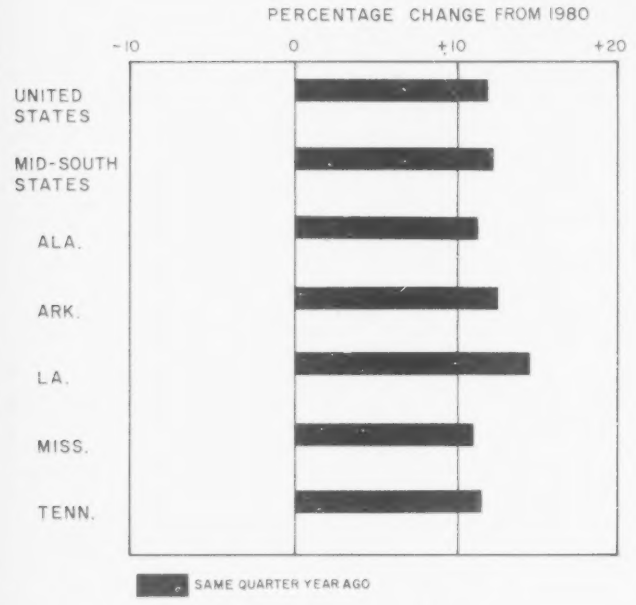
Arkansas was hardest hit, declining more than 40 percent across the board from the levels of a year ago. Construction activity in Louisiana showed signs of weakness in February 1982, with the total number of dwelling units started to date off 16.1 percent from a year ago. However, the value of residential construction managed to register a gain of 4.4 percent from last February.

For January 1982, the nation registered positive gains in the value of non-residential and public works construction but remained depressed in the residential sector, with 43.6 percent fewer units started, on an annualized basis, from last January.

Finance

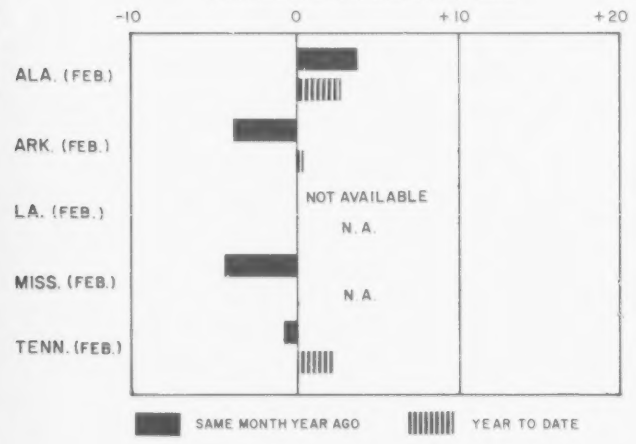
Total deposits at commercial banks in the Mid-South increased 11.2 percent over February 1981, outperforming the national increase of 10.0 percent. Demand deposits were unchanged from a year ago in the Mid-South, while the nation experienced a decline of 2.8 percent. Growth in

PERSONAL INCOME - III QTR 1981



SOURCE: BUREAU ECONOMIC ANALYSIS

SALES TAX COLLECTIONS 1981



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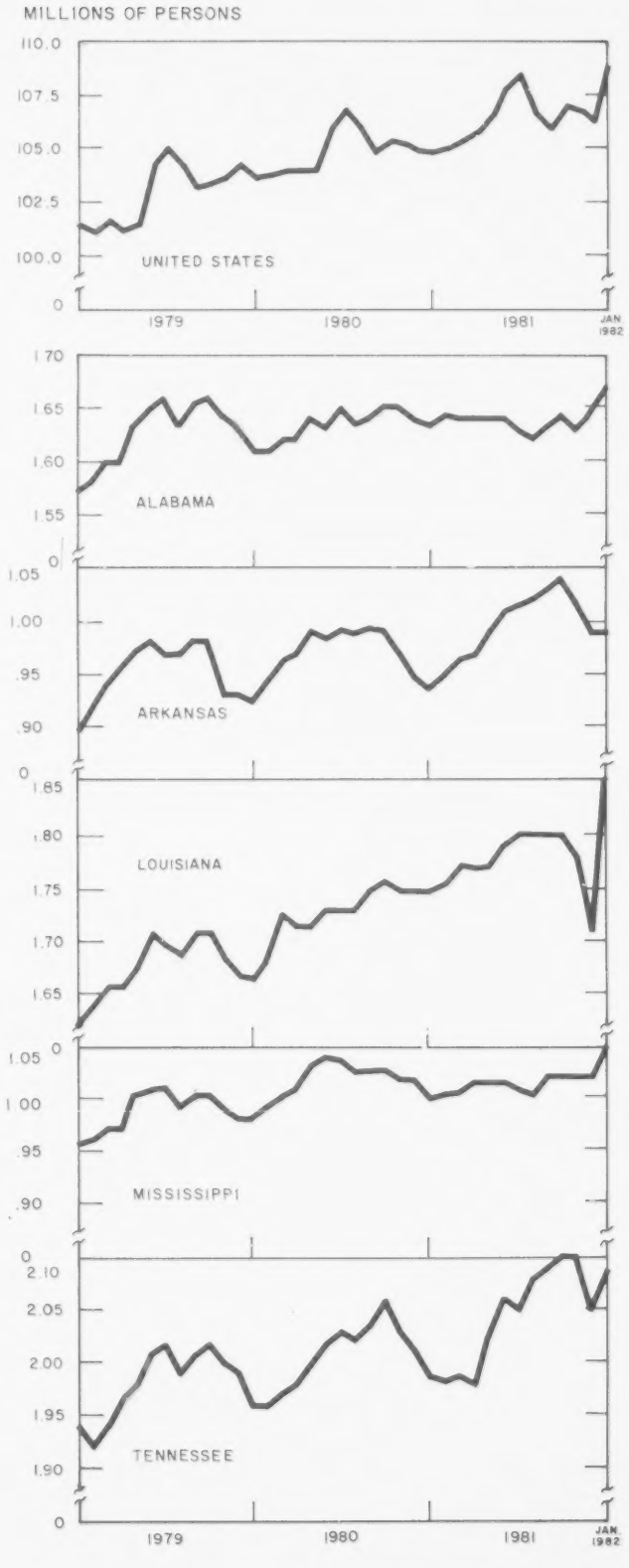
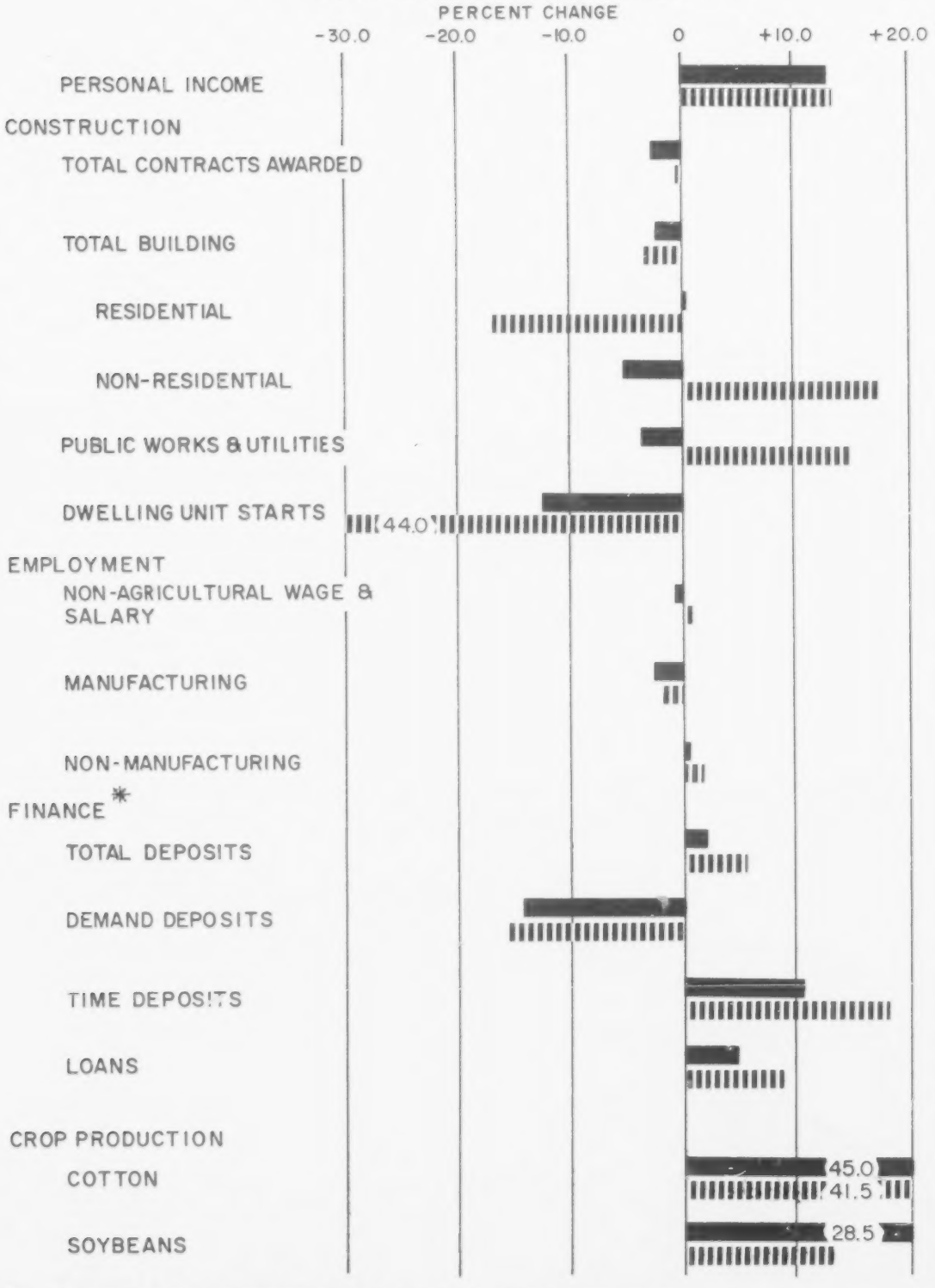


THE MID-SOUTH ECONOMY AND U.S. ECONOMY
1981 COMPARED WITH 1980



* MID-SOUTH DATA ARE FOR MEMBER BANKS IN ARKANSAS, NORTH MISSISSIPPI, AND WEST TENNESSEE. U.S. DATA ARE FOR ALL DOMESTICALLY CHARTERED COMMERCIAL BANKS EXCEPT FOR BRANCHES OF FOREIGN BANKS.

LEGEND: MID-SOUTH; UNITED STATES

SOURCES: BUSINESS WEEK; DODGE REPORTS; SURVEY OF CURRENT BUSINESS; STATE EMPLOYMENT SERVICES; MEMBER BANKS OF FEDERAL RESERVE SYSTEM; STATISTICAL REPORTING SERVICE OF U.S. DEPT. OF AGRICULTURE.

ANALYSIS OF ANNUAL CHANGES IN THE MID-SOUTH ECONOMY 1981

Following the January-July 1980 recession, most economic observers anticipated improved conditions in 1981. However, against a backdrop of two national recessions in as many years, record high interest rates, and depressed farm commodity prices, the Mid-South economy made little headway in 1981. What looked like a recovery for the Mid-South in the first half of 1981 turned into a recession for the last half.

The aggregate **unemployment rate** in the Mid-South was 7.6 percent in April, rising to 8.6 percent by July and reaching 10.3 percent by December. Mid-South manufacturing employment lost 37,000 jobs from last December, while non-manufacturing employment experienced a gain of 14,300.

Total personal income in the nation increased 13.3 percent for the first three quarters of 1981 versus 1980. The Mid-South managed to keep pace, with Louisiana and Mississippi the only Mid-South states that outperformed the nation.

Table 1

1981 PERSONAL INCOME AND PERCENTAGE CHANGE FROM 1980

Area	Personal Income, First 9 Months, 1981 (millions)	Percent Change from First 9 Months, 1980
United States	$1,798,040	+13.3
Mid-South Region	$ 110,831	+13.1
Alabama	23,763	+10.6
Arkansas	13,685	+12.1
Louisiana	30,369	+16.6
Mississippi	14,276	+17.2
Tennessee	28,738	+10.1

Source: Business Week, March 1, 1982.

Mid-South **sales tax collections** totaled $3.5 billion for 1981, an increase of 9.1 percent over 1980. Louisiana registered the largest gain—12.5 percent—while Alabama experienced only a modest gain of 5.6 percent.

Crop production in the Mid-South experienced substantial improvement over the drought-ridden 1980 crop year. Cotton production was up 45.0 percent in the Mid-South, and soybean production registered a gain of 28.5 percent. Louisiana had a 59.8 percent gain in cotton production, while Arkansas managed a 51.7 percent increase in soybean production.

The Mid-South **civilian labor force** totaled 7,418,100 in December 1981, up 0.8 percent over last December. The total number of persons unemployed in the Mid-South stood at 765,700 in December 1981. Manufacturing employment across the Mid-South turned downward at mid-year, declining 2.4 percent from last December. Almost every state was hit in durable goods manufacturing, primarily in the lumber, wood, paper, and textile sectors. Non-manufacturing employment in the Mid-South totaled 4,793,900 workers in December 1981, up only 0.3 percent over the previous December.

Weekly earnings for production workers in the Mid-South, averaged over the five states, amounted to $287.58 for December 1981, an increase of 6.1 percent from last December, outperforming the national increase of 5.2 percent. Mid-South production workers' **hourly earnings**, averaged over the five states, stood at $7.14 in December, up 7.8 percent from December 1980.

Table 2

1981 MID-SOUTH SALES TAX COLLECTIONS AND PERCENTAGE CHANGE FROM 1980

Area	1981 Collections (thousands)	Percent Change from 1980
Mid-South States	$3,567,580	+ 9.1
Alabama	543,673	+ 5.6
Arkansas	359,996	+ 7.4
Louisiana	803,242	+12.5
Mississippi	684,854	+ 9.0
Tennessee	1,175,815	+ 9.0

Source: State Departments of Revenue.

Table 3

1981 MID-SOUTH CROP PRODUCTION AND PERCENTAGE CHANGE FROM 1980

Area	Cotton Production 1981 (thousands of bales)	Cotton Production Percent Change	Soybean Production 1981 (thousands of bushels)	Soybean Production Percent Change
United States	15,733	+41.5	2,030,452	+13.3
Mid-South States	3,658	+45.0	348,580	+28.5
Alabama	418	+52.0	47,150	+49.7
Arkansas	620	+39.6	99,000	+51.7
Louisiana	735	+59.8	65,730	- 1.9
Mississippi	1,570	+37.4	75,600	+22.7
Tennessee	315	+57.5	61,100	+33.1

Source: Crop Production, 1981 Annual Summary, U.S. Department of Agriculture, January 15, 1982.

Table 4

LABOR, DECEMBER 1981, AND PERCENTAGE CHANGE FROM DECEMBER 1980

	United States	Alabama	Arkansas	Louisiana	Mississippi	Tennessee
Civilian Labor Force	106,250,000	1,645,100	991,200	1,707,700	1,020,300	2,055,800
Percent Change	+ 1.4	+ 0.4	+ 4.5	- 2.3	+ 0.8	+ 2.6
Unemployed	8,807,000	202,400	101,500	151,800	95,300	214,700
Percent Change	+21.7	+44.7	+35.9	+28.3	+26.2	+45.9
Unemployment Rate 1981	8.3	12.3	10.2	8.6	9.3	10.4
1980	6.9	8.5	7.9	6.8	7.4	7.3
Non-Agricultural Wage & Salary Employment	92,015,000	1,348,300	742,900	1,652,700	821,100	1,706,300
Percent Change	+ 0.3	- 1.4	- 0.9	+ 2.2	- 2.1	- 1.7
Manufacturing Employment	19,785,000*	347,700	207,600	210,000	214,100	498,000
Percent Change	- 1.9	- 2.9	- 0.9	- 3.8	- 2.5	- 1.6
Non-Manufacturing Employment	55,454,000*	1,000,600	535,300	1,442,700	607,000	1,208,300
Percen Change	+ 1.7	- 0.8	- 0.9	+ 3.2	- 1.9	- 1.8
Production Workers in Manufacturing:						
Average Weekly Earnings	$330.40	$290.65	$257.94	$374.00	$241.10	$274.22
Percent Change	+ 5.2	+ 3.2	+ 6.4	+ 9.2	+ 5.0	+ 3.7
Average Weekly Hours	40.0	40.2	39.5	42.5	38.7	39.8
Percent Change	- 1.9	- 2.2	- 1.7	+ 0.2	- 3.7	- 3.4
Average Hourly Earnings	$8.26	$7.23	$6.53	$8.80	$6.23	$6.89
Percent Change	+ 7.3	+ 5.6	+ 8.3	+ 8.9	+ 9.1	+ 7.3

*Seasonally adjusted.

Source: Departments of Employment Security and Survey of Current Business.

The dollar value of construction contracts awarded in the Mid-South Region 6 continued to decline across the board in December. Total dwelling units were down 12.3 percent from last December. The only Mid-South state to register consistent gains from a year ago was Louisiana. Mississippi was the hardest hit in total construction but managed a 45 percent gain in public works construction. Tennessee was hardest hit in residential construction, declining 19.6 percent from last December, with the number of dwelling units started falling 26.4 percent.

Table 5

VALUE OF CONSTRUCTION CONTRACTS AWARDED IN 1981 AND PERCENTAGE CHANGE FROM 1980
($ figures in thousands)

	United States (November)	Mid-South Region 6[a] (December)	Alabama (December)	Arkansas (December)	Louisiana (December)	Mississippi (December)	Tennessee (December)	West Tennessee (December)
Total Construction	$230,253,000	$9,615,800	NA	$1,217,400	$3,775,000	$1,342,600	$2,565,200	$610,700
Percent Change	- 0.7	- 2.5		- 8.1	+15.4	-14.0	- 8.0	-23.6
Total Building	$191,682,000	$7,233,300	NA	$ 920,400	$2,829,200	$ 863,100	$2,012,300	$506,400
Percent Change	- 3.4	- 2.2		-15.0	+20.4	-29.8	- 9.7	-24.4
Residential Building	$ 77,606,000	$3,776,000	NA	$ 620,800	$1,321,000	$ 556,400	$ 956,000	$246,300
Percent Change	-17.0	+ 0.1		- 3.6	+16.3	- 7.4	-19.6	-30.5
Non-Residential Building	$ 99,541,000	$3,457,300	NA	$ 299,600	$1,508,200	$ 306,700	$1,056,300	$260,100
Percent Change	+17.9	- 5.4		-31.7	+24.3	-51.2	+ 1.5	-17.5
Public Works & Utilities	$ 38,571,000	$2,382,500	NA	$ 297,000	$ 945,800	$ 479,600	$ 552,900	$104,300
Percent Change	+15.5	- 3.3		+23.0	+ 2.7	+45.1	- 1.2	-19.6
Dwelling Unit Starts	871,000[b]	72,557	NA	12,304	24,495	12,607	20,090	4,805
Percent Change	-44.0	-12.3		-16.5	+ 1.9	-15.4	-26.4	-30.7

[a]Region 6 includes Arkansas, South Illinois, Louisiana, Mississippi, East Missouri, and West Tennessee.

[b]Seasonally adjusted annual rate.

Source: F. W. Dodge Reports and Federal Reserve Bulletin.

Table 6

1981 SAVINGS AND LOAN ACTIVITY AND PERCENTAGE CHANGE FROM 1980

	Mid-South States	Alabama	Arkansas	Louisiana	Mississippi	Tennessee
Mortgage Loans Made (millions)[1]	$2,030.9	$273.4	$325.2	$846.6	$196.5	$389.3
Percent Change	-23.1	-29.3	-34.0	-14.4	-23.6	-24.5
Net Savings Flow (millions)[2]	$ 621.9	$ 42.1	$ 14.6	$478.7	$ 26.8	$ 59.7
Percent Change	-66.9	-87.4	-94.9	-33.9	-88.7	-79.8

[1]Figures are for total loans made.

[2]Net savings flow equals new savings received plus dividends credited minus savings withdrawn.

Source: Federal Home Loan Banks of Little Rock, Cincinnati, and Atlanta.

Mortgage loan activity continued to register declines across the board for the Mid-South states, reflecting the depressed state of the housing market. Net savings flow also continued to decline substantially from a year ago, pointing up the tough year the savings and loan industry has experienced.

Total loans by commercial banks in the Mid-South District 8 increased 4.9 percent from a year ago, with time deposits gaining 10.6 percent. Both categories underperformed the nation. Net demand deposits continued to register declines across the board from their levels of a year ago.

Table 7

BANKING - MEMBER BANKS AS OF 12/30/81: PERCENTAGE CHANGE FROM COMPARABLE DATE 1980

	United States[1]	Mid-South States District 8 Only[2]	Alabama District 6	Arkansas District 8	Louisiana District 6 Only	Mississippi District 8 Only	Tennessee District 8 Only
Total Loans	+ 8.9	+ 4.9	NA	+ 8.3	NA	+ 8.5	+ 1.1
Total Deposits	+ 4.6	+ 1.9		+ 4.5		+10.3	- 3.9
Net Demand Deposits	-15.8	-14.3		-16.2		-13.8	-11.4
Time Deposits	+18.6	+10.6		+14.6		+19.4	+ 2.1

[1]United States data are for all domestically chartered commercial banks except for branches of foreign banks.

[2]Mid-South data are available only for District 8, which includes all of Arkansas, North Mississippi, and West Tennessee.

Source: Federal Reserve Board of Governors and the Federal Reserve Bank of St. Louis.

time deposits was substantially up across the board in the Mid-South. The 5.9 percent decline in savings deposits for the Mid-South was well below the national decline of 7.0 percent from last February. As a side note, the March 5, 1982, issue of the *American Banker* listed the Central Bank of the South, located in Birmingham, Alabama, as being the largest commercial bank in the Mid-South, with deposits of $1.7 billion.

For the five-state Mid-South region, mortgage loan activity totaled $93.0 million in January 1982, down 49.5 percent from last January. Mortgage loan commitments for February 1982 in the Mid-South (excluding Arkansas) were down 40.7 percent from last February. Meanwhile, the United States League of Savings Associations reported that, during Feburary, 1.21 percent of the mortgages held by savings and loan associations were 60 days or more delinquent, compared with 1.17 percent in January. Net savings flow activity for the Mid-South totaled $65.6 million in January 1982, up 7.4 percent from a year ago. Tennessee and Louisiana registered healthy gains from their savings levels of a year ago.

LABOR January 1982	United States	Mid-South States				
		Alabama	Arkansas	Louisiana	Mississippi	Tennessee
Civilian Labor Force	108,879,000	1,673,300	999,600	1,852,100	1,050,800	2,101,500
Percent Change Year Ago	+ 0.9	+ 1.7	+ 1.5	+ 5.9	+ 1.8	+ 1.5
Unemployed	9,298,000	245,100	122,700	177,600	111,800	254,100
Percent Change Year Ago	+15.9	+42.1	+27.3	+35.1	+26.2	+28.1
Unemployment Rate						
1981	8.5	14.7	12.3	9.6	10.6	12.1
1980	7.4	10.5	9.8	7.5	8.6	9.6
Non-Agricultural Wage & Salary Employees	89,781,000	1,336,100	713,600	1,619,700	806,900	1,690,800
Percent Change Year Ago	- 0.2	- 0.5	- 2.5	+ 2.2	- 1.1	- 1.7
Manufacturing Employment	19,449,000*	349,600	199,400	209,400	213,100	486,800
Percent Change Year Ago	- 3.1	- 2.7	- 3.5	- 2.6	- 2.6	- 1.9
Non-Manufacturing Employment	70,332,000*	986,500	514,200	1,410,300	593,800	1,204,000
Percent Change Year Ago	+ 0.6	+ 0.3	- 2.1	+ 2.9	- 0.5	- 1.6
Average Weekly Earnings of Production Workers in Manufacturing	$308.38	$228.05	$229.47	NA	$178.75	NA
Percent Change Year Ago	0.0	-16.8	- 5.1		-21.0	
Average Weekly Hours of Production Workers in Manufacturing	36.8	29.2	34.3	NA	28.6	NA
Percent Change Year Ago	- 7.8	-27.0	-13.6		-26.8	
Average Hourly Earnings of Production Workers in Manufacturing	$8.38	$7.81	$6.69	NA	$6.25	NA
Percent Change Year Ago	+ 8.4	+14.0	+ 9.8		+ 7.9	

*Seasonally adjusted.

Source: Departments of Employment Security and Monthly Labor Review.

CONSTRUCTION 1982	United States (January)	Mid-South Region 6[a] (February)	Alabama	Arkansas (February)	Louisiana (February)	Mississippi (February)	Tennessee (February)	West Tennessee (February)
Value of Construction Contracts Awarded								
Total Construction								
Percent Change Year Ago	- 9.7	-39.1	NA	-56.8	-19.0	-44.9	-29.7	-48.9
Percent Change Year-to-Date	NA	-18.9		-45.5	- 4.6	-28.6	-47.2	-52.0
Total Building								
Percent Change Year Ago	-10.6	-37.2	NA	-57.1	-14.7	-32.0	-15.6	-46.5
Percent Change Year-to-Date	NA	-25.1		-44.3	+ 7.0	-23.1	-43.4	-50.2
Residential Building								
Percent Change Year Ago	-22.7	-26.2	NA	-51.3	+ 4.4	-47.1	-27.6	-61.5
Percent Change Year-to-Date	NA	-22.1		-43.3	- 3.7	-31.2	-17.3	-53.9
Non-Residential Building								
Percent Change Year Ago	+10.5	-47.0	NA	-67.9	-31.2	+20.6	- 2.1	-27.7
Percent Change Year-to-Date	NA	-27.9		-45.7	+16.8	- 0.6	-58.6	-46.8
Public Works and Utilities								
Percent Change Year Ago	+14.5	-43.5	NA	-57.8	-18.5	-58.2	-63.5	-67.0
Percent Change Year-to-Date	NA	- 2.0		-49.2	-32.7	-36.5	-63.1	-62.0
Total Dwelling Unit Starts to Date	894,000[b]	7,153	NA	1,144	3,257	1,414	2,490	362
Percent Change Year Ago	-43.6	-31.1		-44.0	-16.1	-30.9	-11.4	-50.1

[a]Region 6 includes Arkansas, South Illinois, Louisiana, Mississippi, East Missouri, and West Tennessee.

[b]Seasonally adjusted annual rate.

Source: F. W. Dodge Reports and Federal Reserve Bulletin.

FINANCE February 1982	United States	Mid-South States	Alabama	Arkansas	Louisiana	Mississippi	Tennessee
Member Banks as of Percent Change from Comparable Date 1981							
Total Deposits	+10.0	+11.2	+11.5	+ 8.7	+13.7	+11.8	+ 8.6
Demand Deposits	- 2.8	+ 0.1	- 0.9	- 6.9	+ 5.0	- 3.7	- 1.9
Time Deposits	+17.8	+16.4	+19.4	+13.9	+18.7	+16.5	+12.6
Savings Deposits	- 7.0	- 5.9	- 8.0	+ 5.2	- 3.1	- 8.4	- 8.2

Source: Federal Reserve Bank of St. Louis and the Federal Reserve Bank of Atlanta.

SAVINGS AND LOAN ACTIVITY January 1982	Alabama	Arkansas	Louisiana	Mississippi	Tennessee[1]
Mortgage Loans Made (millions)	$ 9.5	$ 21.7	$42.5	$ 5.2	$ 14.1
Percent Change Year Ago	-69.9	- 21.1	-36.7	- 80.5	- 55.2
Net Savings Flow (millions)[2]	$25.6	($ 6.2)	$34.1	($ 4.0)	$ 16.0
Percent Change Year Ago	-19.2	-181.8	+58.6	-161.5	+351.7

[1]Figures are for total loans made.

[2]Net savings flow equals new savings received plus dividends credited minus savings withdrawn.

Source: Federal Home Loan Banks of Little Rock, Cincinnati, and Atlanta.

THE TENNESSEE ECONOMY

The Tennessee economy entered 1982 with a historically high unemployment rate of 12.1 percent and initial unemployment claims jumping 28.7 percent in January. Sales tax collections increased only 2.3 percent for the first two months of 1982 compared to 1981. Farm products prices were depressed, off 13 index points from the February 1981 level of 140. A University of Tennessee survey indicates that fewer businessmen in the state expect an economic upturn during the year, 26.4 percent compared to 57.0 percent of the businessmen surveyed last year. The Survey respondents listed interest rates as the number one problem.

A recent report by the Federal Reserve Bank of Atlanta pointed out that the Tennessee economy has been "under a period of long-term growth" but "undergoing severe cyclical strains since much of the economy is interest-rate-sensitive." Problem areas indicated by the report were "minimal job growth," contributing to the increasing unemployment rate, and a heavy reliance on sales tax collections and federal funds to support public services. The bright spot for the Tennessee economy is the boost to the tourism industry expected as a result of the 1982 World's Fair in Knoxville.

Although Tennessee's civilian labor force totaled 2,101,500 for January 1982, an increase of 1.5 percent from a year ago, the number of unemployed persons jumped 28.1 percent. Manufacturing employment lost 9,700 jobs from January 1981. The durable goods sector accounted for about 76 percent of the reduction, with the largest loser being fabricated metal products. In the non-durable goods sector, chemicals was down 1,700 jobs from a year ago. The big loser in the non-manufacturing sector was government employment, which lost 19,100 jobs since last January. However, the services sector managed a healthy gain of 13,600 jobs from January 1981.

Employment in the construction industry continues to be a nagging problem. In January 1982 construction employment was down 8,400 jobs from December 1981 and down 1,600 jobs from last January. For February 1982, the dollar value of construction contracts awarded continued to decline across the board, with 11.4 percent fewer dwelling units started in the first two months of 1982 versus 1981.

Growth in total commercial bank deposits amounted to 8.6 percent for February 1982, the lowest increase in the Mid-South, while savings deposits declined 8.2 percent. However, net savings flow activity at the state's savings and loan institutions was up over 300 percent from the level of a year ago.

BEALE STREET REDEVELOPMENT: A COST-BENEFIT ANALYSIS

*Deborah E. Eisman**

Among other claims to fame, Memphis enjoys the unique distinction of being known as the "birthplace of the blues." The heritage of the blues of W. C. Handy and the culture that spawned its growth centered around a street now famous the world over—Beale Street. Since Handy's era over 70 years ago, the thriving, colorful (even bawdy) community that was Beale Street has become a 9-acre area of vacant, deteriorating buildings. Beale Street became a victim of difficult times, racial tension, and suburbanization. By the late 1960s, urban renewal had cleared land and uprooted families and businesses. With the poor condition of the remaining buildings, the area came to resemble a demilitarized zone.

The historical value remained, however, and in June 1966 a portion of the area known as the "Beale Street Historic District" (BSHD) was designated a registered historic landmark by the Department of the Interior.[1] Located at the southern margin of the central business district, the BSHD encompasses land bounded by McCall Avenue on the north, Fourth Street on the east, Lt. George W. Lee Avenue on the south, and Second Street on the west.

The Memphis Housing Authority has held ownership of the properties within the district (with the exception of A. Schwab at 163-5 Beale) since the urban renewal era of the 1960s. In 1978, MHA transferred ownership and development rights to the Memphis Division of Housing and Community Development.

Until a year ago, the BSHD stood idle, with little or no activity save for the occasional toppling of a building or two. Those remaining suffered from rapidly advancing deterioration brought on by lack of occupation and maintenance. Weather, interior temperature changes, and vandalism all took their toll. The inertia on the city's part was due to (1) lack of funding, (2) controversy over the choice of the controlling body, (3) controversy with respect to the proper racial mix of the controlling body, and (4) the inherent normal economic risks associated with the development of any retail or entertainment venture of similar magnitude. Given the controversy and the condition of the area, it is not surprising that there was no interest on the part of private investors in taking the risk of trying to capitalize on the history of Beale Street. Indeed, the city's attempts at selling parcels of land were fruitless on every occasion. As economists noted long ago, private citizens tend to be myopic from the viewpoint of the nation's future when it comes to investing.

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Why then would the city of Memphis consider such a project that has heretofore been rejected by private investors? To answer this question, it is necessary to introduce the notion of cost-benefit analysis regarding the redevelopment of Beale Street. To date, roughly $9 million in federal funding has been secured, with an additional $3.5 million coming from the state (acquired via revenue sharing) as a result of the Governor's Jobs Conference. This $12.5 million of funding can support the Beale Street project through Phase I, at which time the BSHD could conceivably become a "viable, revenue-generating center."[2] Another $8 million is needed to complete the restoration, which might have to be supplied by tenants in the absence of additional funding. This would boost the total cost to $21 million.[3]

The question this cost-benefit analysis seeks to answer is: Will the project's costs be more than offset by the stream of expected benefits to the residents of Memphis and Shelby County? The scope of the analysis is confined to the residents of Shelby County, as opposed to a national perspective. Also, it is assumed that other downtown development projects such as Mud Island continue on schedule independent of the Beale Street redevelopment project. For purposes of hypothetical interproject comparisons, alternative uses for the resources required by this project are assumed to be other downtown redevelopment projects undertaken by the public and private sectors, including private redevelopment of Beale Street. In the event the latter occurs, it is assumed that the private investors will preserve the historic nature of the district in order to capitalize on it and to comply with federal, state, and local building requirements and codes that apply to registered historic sites.

The intent of this analysis is to quantify costs and benefits expediently, with existing data wherever possible, and to make recommendations for refining estimates in the absence of budget and time constraints. It might further be noted that the underlying methodology could be applied to any redevelopment project that is expected to generate tourist-related revenues.

Benefits

Quantitative Benefits

One of the primary benefits of redeveloping Beale Street is the attraction of dollars to Memphis from conventioneers and general tourists. The dollars spent by these nonresidents are benefits to the extent that they increase the personal income of the residents of this area. Expenditures ultimately increase personal income via the

following mechanism. Goods and services are purchased by the traveler in Memphis. Of the total purchase, 44.4 percent finds its way into the payroll of the merchant, which is an immediate increase in personal income. Lagged increases in income come from the 11.8 percent going to state and local taxes, 4.0 percent to federal income and gas taxes, and 39.8 percent for the purchase of intermediate goods and services, i.e., the cost of goods and services from other industries.[4] For purposes of this analysis, it is assumed that intermediate goods and services are purchased within Shelby County and that federal, state, and local taxes are recycled back into the local economy in the form of government-provided goods and services. Also, no multiplier effects are considered; therefore, the impact of a traveler's $1 expenditure on aggregate personal income in Shelby County is conservatively assumed to be exactly $1. All expenditures are expressed in terms of constant 1981 dollars.

Unfortunately for the cost-benefit analysis, but fortunately for Memphis, much downtown development is currently taking place. This development increases Memphis' chances of becoming a final destination place for tourists but makes it extremely difficult to allocate the portion of increased tourist demand solely attributable to the redevelopment of Beale Street. To properly allocate these joint benefits would require more information, for example, on projected revenues of concurrent redevelopment projects and household survey information on the desirability of Memphis, intended travel to Memphis regardless of additional development, and the likelihood of travel due to Beale Street development versus Mud Island.

Tourism, as it relates to the BSHD, will generate both primary and secondary benefits. Primary benefits will be the additions to personal income from expenditures made within the BSHD, i.e., the portion of Beale Street revenue attributable to nonresidents. Secondary benefits will accrue from the expenditures made by conventioneers and tourists outside of the BSHD but still within Shelby County that would not have occurred in the absence of Beale Street redevelopment. These marginal expenditures will be due to increased tourist demand for Memphis goods and services, evidenced by more visitors and/or longer average stays and/or higher average expenditures per day.

To estimate the primary benefits of tourism, the following model was constructed. First total revenue for the BSHD was projected based on approximately 52,000 square feet of entertainment and restaurant space. Sufficient funding has been obtained to complete the work necessary to open for business. Based on the recent experience of Captain Bilbo's and Number One Beale, annual revenue was estimated at $150 per square foot, yielding total revenues of $7.8 million. The portion of revenue attributable to tourism is projected to be 20 percent for the first year of operation, rising to 30 percent by the fifth year, by which time it is assumed the BSHD will have matured insofar as its revenue-generating capacity is concerned. These last assumptions regarding tourism's share and the maturation period are based on the experiences of Overton Square, Inc.[5]

In the event that additional funding can be secured, regardless of the source, the BSHD upon completion would consist of approximately 306,500 gross square feet. The recommended use is 46 percent retail, 35 percent entertainment/restaurant, and 19 percent office space.[6] With revenues of $200 per square foot of retail space and $150 per square foot of restaurant space, total potential annual revenue would be $44.2 million.

Based on these assumptions, primary tourist-related revenues would peak at $2.3 million per year with a partially developed district, whereas a fully developed district could attract as much as $13.3 million per year from tourists.

Secondary benefits generated by nonresidents are measurable by the dollars spent outside of the BSHD that ultimately wind up as additions to the personal income of Shelby County residents. However, only a portion of this spending can legitimately be attributed to the project itself. This portion was estimated based on conservative goals for increasing the demand for Memphis goods and services by conventioneers and other travelers to the city. During 1980, 215,000 conventioneers visited Memphis, staying 3.3 days on average for a total of 709,500 convention days.[7] Based on the fact that the average length of stay is 15 percent higher in all other cities, an average stay of 3.8 days could eventually be desired by conventioneers if the city had additional attractions. Finally, conventioneers spend on average $75 per day.[8] Assuming $65 is spent outside of Beale Street, the incremental expenditures can now be estimated. One final assumption (based on 1979-80 growth) is that the number of conventioneers grows at 9 percent per year. After five years, the numbers will stabilize. Again, no benefits accrue during the two-year start-up period. (See Table 1.)

Table 1

INCREMENTAL SPENDING BY CONVENTIONEERS

Year	A Number of Conventioneers (per year)	B Net Increase in Average Stay = Target - Original (days)	C Net Benefit = A × B × $65 ($ thousands)
1			
2	--	project incomplete	--
3	235,000	3.3 - 3.3 = 0.0	--
4	256,000	3.4 - 3.3 = 0.1	$ 1,664
5	279,000	3.6 - 3.3 = 0.3	5,441
6	304,000	3.7 - 3.3 = 0.4	7,904
7	331,300	3.8 - 3.3 = 0.5	10, 758
20	331,300	3.8 - 3.3 = 0.5	10,758

A similar analysis was applied to general tourists, which in Shelby County alone numbered approximately 3.8 million in 1980.[9] The average stay of a Tennessee traveler is two days. Only 50 percent of these travelers stay overnight, and the average stay for the 50 percent is 3.8 days.[10] Assuming that 20 percent of the 50 percent who currently do not spend the night could be persuaded to do

so as a result of greater destination appeal due to Beale Street, then effectively 10 percent of current travelers would stay one day longer. It was further assumed that $35 of a tourist's $45 per day expenditures would be made outside of the BSHD. Based on a 2 percent annual growth in tourists which stabilizes after five years, the net benefits are shown in Table 2. If the average stay of conventioneers were lengthened from 3.3 days to 3.8 days, $10.8 million per year in incremental spending could be generated, ultimately adding to the personal income of Shelby County residents. Similarly, if the average stay of tourists were lengthened from 2 days to 2.5 days, $75.3 million in incremental spending could be generated.

Table 2

INCREMENTAL SPENDING BY TOURISTS

Year	A Number of Tourists (per year)	B Net Increase in Average Stay = Target - Original (days)	C Net Benefit = A × B × $35 ($ thousands)
1			
2	--	project incomplete	--
3	3,900,000	2.1 - 2.0 = 0.1	$ 13,650
4	4,000,000	2.2 - 2.0 = 0.2	28,000
5	4,100,000	2.3 - 2.0 = 0.3	43,050
6	4,200,000	2.4 - 2.0 = 0.4	58,800
7	4,300,000	2.5 - 2.0 = 0.5	75,250
20	4,300,000	2.5 - 2.0 = 0.5	75,250

It should be noted that the remaining 70 percent of Beale Street revenues supported by Memphis residents would not represent a net benefit to the city as measured by increases in personal income. From a citywide perspective, changes in personal income would net out, since merchants in the BSHD would gain at the expense of merchants with similar establishments in other parts of the city, e.g., other downtown restaurants or Overton Square establishments. Only to the extent that the Beale Street concept represented a new market of unique goods and services could the case be made for including such revenues. If this were to occur, the proper valuation of benefits would be with respect to the additional consumer surplus gained from Beale Street's offerings, as opposed to that gained from goods and services of similar price and nature normally purchased elsewhere.

Another issue as yet unconsidered deals with the proper method of quantifying the value to society of preserving a historic site. While this could be done by observing the increase in land value as a result of rehabilitation, it is not the preferred method. This is because land values reflect the discounted future benefits producible by the land, which is exactly what was estimated above. To add in the change in land values at this point would be double-counting.[11]

Finally, secondary benefits of rehabilitating old, abandoned buildings can accrue in the form of reductions in the expected value of loss due to fire and/or vandalism. Reducing this likelihood via a combination of tenant occupation and adherence to new fire codes results in cost savings in two ways: reduction in building damage and reduction in utilization of fire-fighting service.

Qualitative and Intangible Benefits

Several qualitative and intangible benefits can be cited with respect to historic preservation in general and the BSHD in particular. First, the concept of "option value" applies in this case, due to the uncertainty of future demand for a unique site which in many respects has no substitutes. The theory of option value states that one's current valuation and willingness to pay for an irreplaceable asset underestimates the full loss of value that would be felt if the asset were destroyed.[12] Because of this uncertain future demand for the asset's amenities (in this case the environment and structures where the blues were born), additional benefits that embody the risk of loss must be considered as well.

Also, there would be a positive effect on city pride. This is based on information gained from a survey of Memphians in which it was found that 78 percent of the respondents were in favor of revitalizing the downtown/riverfront area, and 75 percent were in favor of developing Beale Street. The survey also revealed that the downtown area and the lack of entertainment possibilities were felt to be major weaknesses for Memphis.[13] Related to city pride is the notion of quality of life, which can play a major role in the decision to stay rooted or to relocate to a city that offers a richer cultural environment. All of these benefits, while not strictly quantifiable, should nevertheless be considered in the decision process.

Costs

Land and Existing Buildings

The BSHD covers approximately 395,000 gross square feet (including streets, etc.) or 9.1 acres. When the Division of Housing and Community Development acquired the land from the Memphis Housing Authority in 1978, independent appraisers valued the property at $1,296,000. This appraisal was based on the market value of the land, assuming commercial use of the property.[14] This appraisal also took into account the existing buildings on the land; however, their value was placed at virtually zero, owing to the fact that nothing had been done to extend their maximum intended economic life of 40 to 50 years, which ended long ago.[15] Since 1978, no appreciation in value has taken place.[16]

The question then becomes: Does this valuation represent the true economic value of the property in its current state? The guiding principle should be to value costs with respect to the opportunity costs of the resources used, i.e., with respect to the uses to which the property would be put in the absence of the project. Considering the length of time the Beale Street property has lain idle, it would first appear that the land should have zero opportunity cost. However, special consideration must be given to the historical value of the site, including the remaining buildings. Although there are many approaches to valuing historic sites, all recommended methods are based on the

same economic principles that govern the appraisal of all real property: economic use, contribution, supply and demand, and substitution.[17] Given the recent increase in downtown redevelopment, the alternative use of the BSHD by private developers is not nearly as unlikely as it would have once been, continuing controversies notwithstanding. Ideally, the market value of the Beale Street property as measured by alternative use by the private sector should be adjusted downward, based upon the period of idleness expected in the absence of public funding.[18] However, this analysis, in the interest of expediency, will accept the appraised market value as the cost of the land and existing buildings.

Public Improvements

Public improvements in the way of sewers, drains, public utilities and street lighting, and public parking and plazas will be necessitated by the Beale Street redevelopment project. These are improvements that would not be undertaken otherwise. The cost of such improvements is estimated at $3,290,000.[19]

Building Improvements

Necessary building improvements include rehabilitation, reconstruction, new construction, and demolition. Technically speaking, rehabilitation refers to improvements necessary for reuse, but not necessarily for the same use for which the building was originally intended. (For some buildings on Beale Street, the originally intended use is now illegal.) Rehabilitation includes, for example, replacing roofing and securing the existing shell of the building. Because the buildings are located within a registered historic district, all construction must comply with state and local ordinances and federal regulations. Strict adherence to such codes is particularly important for recipients of federal aid. Primarily, the federal guidelines require the preservation of the original facade whenever possible, with little reference to interior construction. Where rehabilitation cannot accomplish the desired results, reconstruction is necessary, which means saving as much of the building as possible, but essentially reconstructing the building to its original appearance. Finally, totally new construction will be needed, as well as demolition required for public safety and fire access, including the fill of basements. Total rehabilitation and reconstruction costs are estimated at $11,725,000; new construction costs at $4,500,000; and demolition costs at $20,000.[20] These costs are based on approved contract bids and budget estimates for labor and material.

Refinements to the preceding costs could be justified on the basis of (1) the tendency toward inflation of government contract bids, and (2) unemployment in the construction industry. With respect to the former, it will be assumed that sealed bids are examined and the minimum chosen. The unemployment issue is somewhat more complicated. First, it would be inconsistent to neglect multiplier effects on the assumption of full employment and then later adjust costs on a contradictory assumption of less than full employment. Second, the time lag of urban renewal projects makes it difficult to predict what the employment situation will be at the time the project is actually undertaken. Possible scenarios range from increased employment due to concurrent downtown development on or independent of Beale Street, to an increased labor supply from surrounding areas. In theory, this could be accounted for in the same way as idle land, i.e., by downwardly adjusting labor costs based upon the estimated period of unemployment in the absence of Beale Street development. Recalling the assumed alternatives of other public downtown redevelopment or private redevelopment of Beale Street, it is clear that labor, as with other resources, should be valued at the cost necessary to bring it into production.

Energy Cost Savings

Much of the literature on historic preservation cites energy cost saving as one of the many justifications for saving historic buildings from the wrecking ball. For example, the Energy Research and Development Administration reported that buildings built prior to 1941 used the least amount of energy as measured by BTUs per square foot due to wall mass and other features typical of old buildings. Furthermore, the researchers determined that it took 23 percent less energy to rehabilitate existing buildings (including the extraction, manufacturing, delivering, and installing of all building materials) than to build new ones.[21] Even recycling old bricks has been touted as being energy-efficient and a major cost saver.

These potential cost savings were eagerly explored with respect to the buildings in the BSHD, but it was found that national averages do not apply in this case. According to Tony Bologna, lead architect for the Beale Street project, the buildings involved, which date from the 1850s to the 1920s, were built very cheaply and were never intended to display an economic life of more than 40 or 50 years maximum. Furthermore, because of the advanced deterioration that has taken place during the last five to ten years, and the small size of most of the buildings, rehabilitation costs per square foot will actually exceed new construction costs. Specifically, the rehabilitation costs will average nearly $50 per square foot, while new construction will average closer to $40. Even the bricks will not be salvageable. Finally, due to the inferior construction of the buildings and new building techniques, any energy savings for heating and cooling would be negligible.

In terms of accounting costs only, demolition and new construction would be the less costly alternative; however, the historic nature of the buildings prevents this from being a viable alternative.

Nature of Funding and Timing

Since nearly $12.5 million in federal funds to date have been secured for the Beale Street redevelopment project, $12.5 million of the preceding costs will be borne by Shelby County residents. Federal income tax payments must be made regardless of where the proceeds are channeled from year to year. Therefore, those costs are offset and

should not be entered into the final cost-benefit calculations. However, for illustrative purposes, the feasibility of redevelopment with and without federal funding will be considered.

Three possible scenarios will be considered: (A) all costs are borne locally, whether by the city of Memphis or by the private sector, (B) no federal funding in addition to the $12.5 million materializes and a commitment of $8 million in local funds is secured, and (C) no additional federal or local funding occurs after Phase I and redevelopment goes no further. The case where 100 percent federal funding is obtained will not be explored because obviously a project with zero costs will always be the preferred alternative. Instead, since there is a good possibility that additional federal funds will not be forthcoming, it is much more useful to examine the alternative of local funding for Phase II, versus no Phase II development. The timing of costs as they are incurred locally is shown in Table 3.

Table 3

TIMING OF COSTS INCURRED AT THE LOCAL LEVEL

Year	Memphis Pays All Costs	Phase I - Federal Phase II - Local
0[a]	$ 1,296,000	--
1	1,119,000	--
2	4,544,000	--
3	6,013,000	--
4	7,858,000	$ 7,858,000
Total	$ 20,830,000	$ 7,858,000

[a]Initial land cost.

Risk and Uncertainty

Any projections made regarding the final outcome of the Beale Street project will be shrouded in uncertainty, since no one at this time is capable of making such a prediction with any precision. Admittedly some relevant risk factors can be quantified, e.g., the average business failure rate by industry.[22] But data such as this would apply only to each individual establishment, whereas the Beale Street concept must be addressed in terms of a unified whole. Not to disregard entirely such risk due to economic factors, a corresponding adjustment will be made to the rate of discount.

The overriding elements, it seems, are those of uncertainty with respect to governmental and political factors, as well as racial factors. Initially, the biggest uncertainty was whether or not the project would ever get off the ground. With construction currently under way, it appears that redevelopment is off to a good start. However, forthcoming benefits will depend upon the extent to which Beale Street is (1) developed (i.e., Phase I versus Phase II), and (2) accepted by the public. Unfortunately no one has been able to adequately assess these probabilities.

Discount Rate

Since redevelopment produces outputs highly competitive with private outputs, it seems reasonable to treat the opportunity cost of resources as the market rate relevant to private resource use.[23] Market rates as such have the additional advantage of including the element of economic risk, as opposed to political uncertainty. Therefore, the market rates of 15 percent and 20 percent will be used for discounting. The former represents the current cost of long-term construction financing typically provided by insurance companies; the latter reflects the current cost of a one-year, commercial construction loan with bank financing.[24]

While the choice of a discount rate generally deserves far more attention than that provided for in this analysis, it should be noted that the choice is not so important in a case such as this, where the alternative uses of resources are other urban renewal projects that would involve similar time patterns of costs and benefits.[25]

Decision Rule

The net present value (NPV) rule will be used so as to capture the time value of the initial costs versus the lagged benefits.[26] A time period of 20 years was selected because (1) it covers the crucial first five years, by which time the Beale Street concept is assumed to have matured, i.e., attained full market potential, and (2) it spans the minimum expected economic life of the buildings being renovated and constructed. As mentioned above, alternate discount rates of 15 percent and 20 percent will be used. Finally, the choice of this decision rule allows for interproject comparisons in cases where no net costs are incurred, and thus the benefit/cost ratio is undefined.

Also, for two of the alternatives, the benefit/cost ratio will be computed. Although a decision rule based on a benefit/cost ratio greater than one and the above rule are equivalent, the alternative statistics are presented for reference with other projects evaluated in terms of discounted return per discounted dollar of outlay.

Conclusions

The final computations are presented in Table 4. If one has accepted all the heroic assumptions made thus far, it appears that Beale Street should definitely be redeveloped, even if it requires 100 percent local funding. In the case of alternative B versus alternative C, it is interesting to note that the undiscounted sum of net benefits is greater for B ($1.6 million) than for C ($1.4 million). However, based on the net present value, discounted at both 15 percent and 20 percent, the best alternative would be B, where Phase II is completed at local expense.

The assumed benefits may well be overstated, particularly with respect to the portion of increased convention and tourist demand stimulated solely by the BSHD. Also, the large element of uncertainty still remains to be quantified. Yet even a very large downward revision in the discounted stream of benefits would still offset the $4 million to $4.8 million is discounted costs necessary to complete Phase II. The same could also be said of alternative A, where the costs of local funding are very small relative to the projected benefits.

In summary, it appears that Beale Street redevelopment should be undertaken, even when allowing for a

Table 4

BENEFITS AND COSTS OF FUNDING ALTERNATIVES
(In Thousands of 1981 Dollars)

		Benefits	Costs	Benefits - Costs
Alternative A: Phases I and II Locally Funded				
20-year total		$1,572,271	$ 20,830	$1,551,891
Discounted sum	@ 15%:	336,609	14,084	322,525= NPV[1]
	@ 20%:	228,060	12,578	215,482= NPV
Benefit/cost ratio				
	@15%: 23.9			
	@20%: 18.1			
Alternative B: Phase I Federally Funded, Phase II Locally Funded				
20-year total		$1,572,721	$ 8,358	$1,564,363
Discounted sum	@ 15%:	336,609	4,779	331,830= NPV
	@ 20%:	228,060	4,031	224,029= NPV
Benefit/cost ratio				
	@15%: 70.4			
	@20%: 56.6			
Alternative C: Phase I Federally Funded, No Phase II Occurs				
20-year total		$1,402,791	--	$1,402,791
Discounted sum	@ 15%:	301,460	--	301,460= NPV
	@ 20%	203,699	--	203,699= NPV
Benefit/cost ratio				
	@ 15%: Not defined			
	@ 20%: Not defined			

[1]NPV = net present value.

large margin of error in the preceding analysis. Cost-benefit analysis strongly suggests that redevelopment is justified on the basis of potential economic contribution to the city of Memphis, which ultimately stems from the value of preserving a viable downtown area and a part of history.

[1]Beale Street National Historic Foundation, *A Recommended Implementation Plan for the Development of the Beale Street Blue Light District*, April 1977.

[2]Tony Bologna, Bologna & Associates, Inc. Personal interview, April 9, 1981.

[3]The context in which "cost" is being used here is with respect to land, public improvements, building improvements, new construction, and demolition as valued by current market prices. The economic concept of cost is examined in detail in the section entitled "Costs."

[4]Lewis Copeland and Leona Copeland, *Tennessee Travel Business During 1977: An Economic Analysis*, January 1977, p. I-14.

[5]A survey of Overton Square patrons November 15-30, 1979, revealed that 27 percent were nonlocal.

[6]Bologna & Associates, Inc., *Concept Plan, Beale Street Historic District*.

[7]Memphis Convention and Visitors Bureau.

[8]Ibid.

[9]Ibid.

[10]Copeland and Copeland, p. I-12. The percentage of overnight visitors is true for Memphis also, as confirmed by a Zoo Visitor Survey of 483 visitors.

[11]E. J. Mishan, *Economics for Social Decisions: Elements of Cost-Benefit Analysis* (New York: Praeger Publishers, 1973), p. 66. Also Donald E. Vitaliano, "Cost-Benefit Analysis of Downtown Renewal in Troy, New York," *The Review of Regional Studies 4*, no. 3 (Winter 1974): 90, 94.

[12]Robert H. Haveman and Julius Margolis, eds., *Public Expenditure and Policy Analysis*, 2nd ed. (Chicago: Rand McNally, 1977), pp. 155-56.

[13]Message Factors, Inc., *Strength and Weakness Analysis for the City of Memphis*, September 1979, pp. 8, 15.

[14]Clint Dayton, Housing and Community Development, Real Estate Division. Personal interview, March 13, 1981.

[15]Tony Bologna, Bologna & Asociates, Inc.

[16]Clint Dayton.

[17]*Information from the National Trust for Historic Preservation: Factors Affecting Valuation of Historic Property* (Washington, D.C.: Preservation Press, 1976), pp.1-2.

[18]Mishan, p. 53.

[19]Bologna & Associates, Inc.

[20]Ibid.

[21]Baird Smith, *National Benefits of Rehabiltating Existing Buildings*, Supplement 11593, vol. 2, no. 5 (1977).

[22]For eating and drinking establishments, the failure rate was 14 per 10,000 operating concerns. Dun & Bradstreet, *The Business Failure Record*, 1979, p. 6.

[23]Jerome Rothenberg, *Economic Evaluation of Urban Renewal* (Washington, D.C.: The Brookings Institution, 1967), pp. 110-11.

[24]First Tennessee Bank, Mortgage Loan Division, April 1981.

[25]Rothenberg, p. 110.

[26]The net present value rule states that a project should be undertaken when the discount sum of benefits exceeds the discounted sum of costs, i.e.:

$$NPV = \sum_{i=1}^{n} \frac{(B_i - C_i)}{(1+r)^i} > 0$$

where B_i = benefits in year i, C_i = costs in year i, r = the discount rate, and n = the life of the project.

THE PUBLIC SERVICE EMPLOYMENT PROGRAM IN MEMPHIS/SHELBY COUNTY

*David H. Ciscel, John E. Gnuschke, and I. Edward Jernigan**

This article evaluates the impact of CETA-sponsored public service employment jobs on the delivery of public services in the greater Memphis area. One of the early actions taken by the Reagan administration was elimination of the public service employment (PSE) programs operated under the Comprehensive Employment and Training Act (CETA). As President Reagan stated in his economic blueprint, *America's New Beginning:*

> The 300,000 individuals who currently hold jobs completely or partially funded with CETA resources will continue in their jobs and be absorbed in the regular state and local government payroll, be placed in an unsubsidized job in the private sector by the prime sponsor, or have to seek employment elsewhere.[1]

PSE Background

Initially authorized in 1973 and currently authorized through fiscal year 1982, CETA had two titles (II-D and VI) that provided public service employment. Title II-D authorized a program of developmental transitional public service employment and training services in areas with high unemployment rates that maintained themselves over an extended number of months. The II-D program was meant to be counterstructural—that is, it provided the transitional employment necessary for the worker whose skills and experience did not match the available job opportunities to gain unsubsidized employment. Participants in the PSE jobs were to be on welfare or economically disadvantaged and unemployed for 15 weeks or more prior to participation in the program.

Title VI was enacted in late 1974 to provide temporary countercyclical PSE jobs as a cushion to the rising unemployment of the 1974-1975 recession. Extended into the late 1970s and early 1980s, Title VI authorized the employment of a fraction of the total unemployed as the employment rate rose. PSE workers under Title VI were to be placed in entry-level jobs which would be subsidized for a short time (not more than 78 weeks).

Emphasis in CETA has shifted from public service employment to training, especially on-the-job training, in part because skill training appears to lead to higher post-program increases in earnings than public service employment. In addition, PSE may have turned out to be a poor countercyclical device for reemploying the unemployed. In sum, the federal government has reconsidered its commitment to the philosophy of "government as employer of last resort" as a solution to problems of unemployment in a stagnant economy.

Memphis/Shelby County PSE

This article focuses on two aspects of the use of public service employment jobs in the Memphis regional economy. During the past five years public service employment has offered the structurally and cyclically unemployed an alternative job opportunity. The initial impact of the elimination of PSE jobs will be to reduce the alternative job opportunities for unemployed workers. Given current economic trends, it is important to assess the importance of this loss of job opportunities for the local economy. Will unemployment rates rise, will participants drop out of the labor force, or will unemployment insurance claims see an upward movement during 1982?

The second aspect of public service employment jobs considered in this article is the effect on local government agencies. Public service employment has been somewhat of a boon to local governments and their agencies. Services that might have been restricted or not offered at all were delivered because of CETA public service employment participants. In some cases, city government has been able to substitute CETA PSE workers for regular city employees, particularly in departments that employ unskilled and semiskilled workers. With the termination of PSE, a major question arises concerning the impact this loss will have on the ability of local government to deliver the current level of services, and which departments and agencies will be most affected by the loss of public service employment positions.

Memphis SMSA

The location of Memphis on a bluff of the Mississippi River has, to some degree, helped to specify its industry. Trade and commerce, particularly as they relate to the agricultural needs of the region, have dominated the city economy. Memphis has served as the region's financial center, providing furnish money in the agricultural areas and funds for industrial development in light manufacturing, transportation, and retail trade. The Tennessee Valley Authority has provided inexpensive energy for the region's economic infrastructure.

The labor force is structured so that it matches the basic industrial structure. In early 1981, according to data from employers, the Memphis SMSA provided employment for 355,000 workers, up from 316,000 in early 1976. The areas of employment growth have been in construction

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(up over 2,000 jobs), wholesale and retail trade (up 12,000 jobs), and service (up over 13,000 jobs). Manufacturing, a sector that made up 16 percent of Memphis employment in 1976, has remained small and stagnant throughout the five-year period.

Until the onset of the current recession, the unemployment rate in Memphis has generally been lower than that of the nation. In addition, it tends to lag the national cycles. For example, in March 1976 the unemployment rate in Memphis hovered around 8 percent, up over a point from the year before, while the U.S. rate was actually falling. In the period 1976-1981, Memphis' unemployment rate generally remained in the 6 to 7 percent range, usually a full point below the national rate.

The local economy tends to provide jobs that are relatively low paying compared to those of other urban settings. Lack of a strong manufacturing base, and economic growth centered on sectors that are heavy users of semiskilled blue-collar or clerical white-collar employees, helped to contribute to the existence of an economy whose productivity has not justified high incomes for the core of employed workers.

Finally, government employment, both federal and local, has made up a slowly declining fraction of the region's total employment, peaking at around 68,000 employees in the late 1970s. Public service employment, either as an attempt to provide transitional benefits due to structural dislocations or as countercyclical employment, has never accounted for an appreciable percentage of either government employment or labor market employment as a whole.

Public service employment has played a marginal role in Memphis. As a program it has neither resulted in a dramatic growth in government employment nor reduced the level of unemployment significantly. Such an aggregate view of PSE, however, obscures both the benefits and the dislocations that it has brought to unemployed individuals and to various government agencies in the Memphis economy.

PSE Demographics

Participants in the two Memphis/Shelby County public service employment programs have been representative of the demographic character of the city and the problems in its economic structure. Nonwhite participation in the Memphis SMSA civilian labor force was estimated in 1978 to be 33 percent.[2] Nonwhite unemployment rates of 9.4 percent, however, were so much higher than those of the general working population in Memphis that blacks represented 56 percent of all those unemployed in 1978. In addition, of the 25,026 applicants on record in Memphis on September 30, 1979, with the Tennessee Job Service, 81 percent were black, 87 percent had 12 years or less of education, and 71 percent were classified in the semiskilled blue-collar occupations. By occupation, black workers represented a significantly larger share of the operatives, transportation equipment operatives, laborers, service workers, and household workers than their share of the employed labor force. And, finally, the occupations listed as the last occupation of the experienced unemployed were the same as those dominated by the nonwhite portion of the employed labor force. While these unemployment data were developed for particular moments in time, they are continuing characteristics of the population demographics in the Memphis economy. The relevant population that Memphis PSE programs drew from was biased toward minorities, the least well educated, and the semiskilled.

The demographic characteristics of Memphis/Shelby County PSE participants for fiscal years 1978 and 1979 indicate that (1) the population in need had considerable stability, since data for the two years were so similar, and (2) the ranks of PSE participants were fairly predictable given the characteristics of the local population and labor force. The typical PSE participant during these two years was male (50-60 percent), was in the prime working age group of 22-44 years (over 60 percent for both years), had 12 years or less of formal education (60-70 percent), was black (over 80 percent), and came from disadvantaged households (close to 90 percent for the two years). Memphis successfully met the congressional mandate contained in the 1978 amendments to CETA to target PSE jobs toward the economically disadvantaged.

The PSE participant in Memphis was fairly similar in demographic characteristics to the typical PSE job holder in the nation. The only great difference between PSE participation nationally and locally was the high enrollment of black workers in the Memphis area. That difference, however, is probably insignificant when adjustments are made for unique characteristics of the Memphis labor force.

Impact of PSE on Participants

As the PSE demographics indicate, the Memphis/Shelby County PSE program employed those workers whose personal characteristics subject them to frequent loss of employment and income. Although PSE did not seem to have an impact on the aggregate level of unemployment in the Memphis economy, at the disaggregated level PSE served its intended purpose for the individual worker. Whether or not the government should serve as an employer of last resort is a debatable topic. What is not debatable, however, is that PSE-employed workers, without PSE, would have been thrown into the ranks of the below-poverty-level, welfare-consuming unemployed Through the PSE program, these individuals were earning an income and paying taxes.

Table 1 summarizes the Memphis/Shelby County PSE program costs and outputs for Titles II-D and VI for fiscal years 1977-1980. The data present anything but a consistent pattern of expenditures and results. Cost per participant soared and termination rates plunged during fiscal year 1978. On the positive side an increasing number of people were served each year. The termination rates for both Titles II-D and VI indicate that the turnover was sufficient for new participants to enter the program, thus opening the program to those currently in need of labor market assistance. Indeed, the costs were probably

Table 1

PSE PERFORMANCE: MEMPHIS/SHELBY COUNTY
FISCAL YEARS 1977-1980

	Title II-D				Title VI			
	1977	1978	1979	1980	1977	1978	1979	1980
Total expenditures	$1,757,899	$2,031,263	$2,455,003	$4,702,151	$3,803,332	$11,111,288	$6,265,264	$4,271,987
Total enrollments	601	439	1,457	1,759	1,103	2,008	2,203	1,415
Average cost per participant	$2,925	$4,637	$1,685	$2,673	$3,448	$5,534	$2,844	$3,019
Total terminations	458	155	601	1,131	92	1,097	1,247	1,095
Total placements	82	41	101	146	37	321	280	261
Direct placements	0	0	0	0	0	0	0	0
Indirect placements	66	35	83	146	22	205	193	261
Self placements	16	6	18	NA	15	116	87	NA
Other positive terminations	308	53	293	11	5	187	344	51
Nonpositive terminations	68	61	207	NA	50	589	623	NA
Termination rate	76%	35%	41%	6%	8%	55%	57%	77%
Placement rate	18%	27%	17%	13%	40%	29%	22%	24%
Direct placement rate	0	0	0	0	0	0	0	0
Indirect placement rate	80%	85%	82%	100%	59%	64%	69%	100%
Self-placement rate	20%	15%	18%	NA	41%	36%	31%	NA
Other positive termination rate	67%	34%	49%	1%	6%	17%	28%	4%
Nonpositive termination rate	15%	39%	34%	NA	54%	54%	50%	NA

Source: *The Governor's Annual Report*, 1977-80, Tennessee Employment and Training Council.

modest when compared to alternative welfare costs, especially considering the fact that these workers were maintained as productive employees during their labor market problem period.

The data summarized in Table 1 also show that the Memphis/Shelby County Prime Sponsor was much more successful in placing Title VI participants than Title II-D participants. The placement rates for Title II-D ranged from a low of 17 percent in 1979 to a high of 27 percent in 1978, while Title VI placement rates were slightly higher each of four years for which complete data are available. To the extent that PSE was to provide transitional structural retraining (Title II-D) or countercyclical employment (Title VI), the experience of the Memphis/Shelby County Prime Sponsor indicates that employment as a last resort is easier to provide than placements into unsubsidized employment.

Of total terminations in Titles II-D and VI, the placement rate was 22 percent in 1977, 29 percent in 1978, and 21 percent in 1979. In each year the range of wages earned from post-PSE employment represented an increase over pre-PSE employment earnings for those workers who gained new employment. The minimum wage was $2.30 per hour in 1977, $2.65 per hour 1978, and $2.90 per hour in 1979. If the $3.00 per hour break is used as a standard, 76 percent of PSE participants in 1977 worked for approximately minimum wage (or less) before entering a CETA program, while 71 percent experienced a wage increase to more than $3.00 per hour in their post-PSE employments. As the minimum wage moved toward $3.00 per hour, the percentage of pre-wages that were over $3.00 increased. However, in each of the years the percentage of workers earning over $5.00 per hour after leaving CETA PSE was small, indicating once again that PSE largely served workers whose wages were at or near the poverty level.

In conclusion, the demographics of PSE jobs in the Memphis/Shelby County area indicate that PSE participants represented the disadvantaged worker in the Memphis labor force—the black, semiskilled, minimally educated blue-collar worker. While the impact on aggregate unemployment statistics may have been minimal, the PSE program had a significant impact on those members of the labor force whose unemployment resulted from structural dislocations.

The impact of the termination of PSE in Memphis is to reduce the alternatives available to this segment of the labor force. For most of their work lives the individuals who participated in PSE in Memphis will face problems of high job turnover and employment at near minimum wages. However, the elimination of public service employment certainly will not mean that this group of individuals will be permanently unemployed.

Impact of PSE on the Delivery of Public Services

Considerable argument concerning PSE positions has concerned whether or not local government substituted federally financed positions for locally financed positions. This question becomes more important as PSE is terminated. Will discontinuing public service employment have a detrimental impact on the quality and quantity of services offered by local governments and their constituent agencies? The answer to that question is not clear cut. Several complicating factors are involved. First, PSE financed by the Memphis/Shelby County Prime Sponsor peaked in fiscal year 1979, and two years of contraction had already occurred before the program was eliminated. Second, the current tendency to reduce the size of local and state government coincides with the elimination of CETA PSE, so that separating the apples and oranges of governmental contraction is difficult. Finally, the impact of double digit inflation on the ability of local government to generate enough revenues to cover expenditures has meant that federal assistance has become more important in recent years for reasons other than the deliberate federalization of local expenditure categories.

Table 2 illustrates the relationship of total employment patterns in state and local government to PSE employment in state and local government during fiscal year 1977. Regular state and local employment was dominated by employment in those functional areas of government that provide the largest share of services to citizens: education, health, and public works. By contrast, PSE employment generally was skewed toward employment opportunities in functions that could utilize the semiskilled talent that was available through CETA. Entry-level jobs in large numbers were available in education, public works (sanitation), social services, and parks and recreation.

Table 2

COMPARISON OF CETA PSE AND ALL STATE AND LOCAL GOVERNMENT EMPLOYMENT BY FUNCTION, 1977
(Percentage Distribution)

Function	Total State and Local	Total PSE
All Functions	100	100
Education	49	15
Health and hospitals	11	7
Public works and transportation[1]	12	25
Police and corrections	7	8
Social services	3	12
Parks and recreation	2	13
Fire protection	2	1
Administration and miscellaneous	13	20

Note: Details may not add to 100 percent due to rounding.
[1]Includes highways, local utilities, natural resources, sanitation, and transportation.
Source: Total state and local employment data are from U.S. Bureau of the Census, *Public Employment* (Washington, D.C.: Government Printing Office, 1977), p. 9; PSE data are based on unpublished Employment and Training Administration data for Titles II-D and VI sustainment and on sample of project data summaries for 28 areas for Title VI projects.

The occupational and divisional movement of PSE job holders in the Memphis/Shelby County area cannot be traced precisely, but indications are that it was similar to that of national PSE. The big users of PSE jobs were the city divisions of police services, sanitation services, and public works. In other agencies of the city, the Board of Education, the Public Library system, and the City of Memphis Hospital were all users of significant numbers of PSE workers. For example, in fiscal year 1979, outside agencies such as City of Memphis Hospital, the Public Library, and Shelby State Community College received 35, 27, and 31 positions, respectively, through Title VI. Similarly, Title II-D provided for 277 slots for the Memphis Board of Education in 1979. Since these figures represent positions, not employees, and turnover occurred during the year, an opportunity was provided for several PSE workers to gain experience in each slot. The number of participants served through PSE in the Memphis SMSA rose from 1,704 in 1977 to 3,660 in 1979. Expenditures jumped from $5.5 million to almost $9.0 million during the same period.

The city of Memphis was the largest employer of CETA PSE workers from the time the program began. Table 3 illustrates the number of PSE positions and the total number of positions in each division of the city government from 1977 to 1981. The city hired its first PSE employees in 1975, using the 25 positions in the Parks Division. In 1976 the number of PSE positions rose to 433, and PSE reached its peak with 925 positions in 1980. As can be noted from an examination of Table 3, PSE workers were spread out throughout the divisions of the city. However, the largest numbers of PSE workers, year after year, were

Table 3

PUBLIC SERVICE EMPLOYMENT BY DIVISION, CITY OF MEMPHIS
FY 1977-81

	1977		1978		1979		1980		1981[a]	
City Divisions	CETA Positions	Total Positions	CETA Positions	Total Positions	CETA Positions	Total Positions	CETA Positions	Total Positions	CETA Positions	Total Positions
Executive	3	104	1	102	4	96	4	97	1	91
Finance and Administration	3	115	21	128	33	187	29	195	20	199
Human Services	18	286	66	112	14	123	144	249	147	249
Fire	6	1,619	11	1,535	53	1,666	55	1,646	27	1,620
Police	42	1,882	68	1,824	75	2,035	76	2,016	48	2,000
Parks	106	1,143	134	2,789	139	2,956	120	2,534	49	2,481
Sanitation	111	1,482	282	1,430	153	1,501	292	1,568	292	1,510
Public Works—General	50	329	55	590	81	602	79	563	79	577
Public Works—Sewer	—	214	—	339	18	359	18	358	18	365
Personnel	3	35	25	69	24	67	17	71	11	67
Public Service	4	720	47	886	54	945	53	967	39	951
General Service	21	187	39	219	27	187	25	193	17	187
Community Development	—	101	—	100	—	182	—	189	—	195
Council	—	14	—	18	1	17	—	17	—	18
Courts	4	89	1	122	15	146	15	133	15	129
Totals	371	8,320	750	10,263	691	11,069	925	10,796	763	10,639

[a]Figures for fiscal year 1981 are estimates.
Source: Data provided by Dan Blain, City Personnel Office.

employed in Human Services, Parks, Sanitation, and Public Works.

In general, PSE slots were entry-level, physical-labor-type jobs. For example, in the Parks Division in years 1978-1980, about half of the PSE employees were in grounds maintenance. For those same years, 20 positions each were assigned to the zoo and golf courses for maintenance. In the Sanitation Division almost the entire complement of PSE was assigned to garbage collections from 1978 to 1981. In the Public Works Division a majority of CETA workers were assigned to drain and sewer maintenance. In addition, it is important to note that 70 to 75 percent of the Parks Division positions were part-time jobs, so PSE workers made up a fairly large proportion of the full-time staff.

This is not to say that the other divisions of the city did not have some dependence on CETA employment subsidies. In the Fire Department PSE financed a small number of fire fighters (2 to 3 percent) for 1979-1981. In the Police Department there were significant numbers of PSE positions in administration, uniformed patrol officers, and detention.

Outside city government other public agencies used smaller numbers of workers financed by PSE monies. Shelby County government, the State Technical Institute in Memphis, the Public Library, City of Memphis Hospital, and several nonprofit agencies used PSE workers. In each case most of the PSE employees had entry-level clerical jobs. The largest user of PSE funds outside the city government was the Board of Education of the Memphis City Schools. Table 4 lists the number of PSE positions and the number of regularly funded positions for three academic years, 1978 to 1981. While nine occupational titles were, at one time or another, funded through CETA PSE, the most consistent use of PSE positions was for clerk typists, clerical aides, and technical aides. PSE employment made up 22 percent of the total Board of Education employment in these three occupations in 1979-1980 and 21 percent in 1980-1981. Overall the impact of the termination of PSE on specific occupations with the Board of Education could be important. To the extent that the Board is understaffed in entry-level clerical positions, the loss of PSE will be felt in the quality and quantity of work produced by this agency.

The impact of the elimination of CETA PSE positions on aggregate employment of local government will be minor. The numbers were never great enough to dramatically change the type of service provided by city/county government. In addition, the positions funded were usually not jobs that called for direct contact with the public, since PSE employees provided support services for the agencies they worked within. While the overall impact of CETA PSE on local government in Memphis has not been substantial, both the numbers of people and the size of the funds provided through Titles II-D and VI meant that particular agencies were somewhat dependent on PSE to maintain current levels of service.

Two points need to be made concerning the use of PSE workers to provide local services. First, during the times that the city used CETA-subsidized employees, city employment grew from 8,030 positions in 1975 to 10,639 positions in 1981. It was a period of employment growth for the local government. Instead of federalizing the funding of local personnel, it is obvious from the numbers that local government agencies used federal funds to partially fund that employment growth. In turn, as the city grew and required more parks, sanitation, and fire and police protection, part of these new services were provided by using CETA funds.

Second, the use of CETA funds for government employment tended to be highly concentrated. Just as it was the unemployed, low-skilled worker who most needed and took advantage of PSE, it was generally the government divisions using the lowest-skilled workers and most in need of additional manpower that gained the most CETA PSE positions when CETA was at its peak. Those divisions that have had to engage in the greatest reduction in public services to adjust to the reduction in PSE funding—sanitation, parks, public works, and education—are also to the agencies that have been hardest hit by recent efforts to reduce government size in general.

(Continued on page 27)

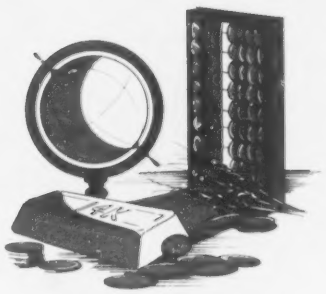
Table 4

PUBLIC SERVICE EMPLOYMENT BY OCCUPATION
CITY OF MEMPHIS PUBLIC SCHOOLS
FY 1978-1981

	1978-1979		1979-1980		1980-1981	
Position Description[1]	PSE Positions	Regular Positions	PSE Positions	Regular Positions	PSE Positions	Regular Positions
Apprentice Printers	2	4	3	4	3	0
Data Processing Specialist	0	3	1	0	1	0
Clerk Typists	20	88	20	96	20	71
Clerical Aides	0	15	27	76	8	76
Technical Aides	9	37	15	44	21	43
Bus Drivers	0	61	4	67	4	73
OSHA Inspector	2	2	0	1	0	1
Teacher Aides	41	221	0	266	0	249
Junior Accountant	1	1	0	1	0	1
Total	75	432	70	555	57	514

[1]Other Board of Education occupations had no CETA positions. Numbers were provided for positions available during the academic year.
Source: Data provided by E. Ray Holt, Deputy Superintendent, Memphis City Schools.

TAX CORNER



by Wm. Brent Carper, Ph.D., C.P.A.

FUNDAMENTALS OF RETIREMENT PLANS

Did you know that you now can invest $2,000 a year for the next 35 years in an Income Retirement Account (IRA) beginning at age 30 and retire at age 65 with a monthly income of over $13,000 per month? That's right! An individual worker investing $2,000 per year compounded at 12 percent annually will have an investment at age 65 of $1,106,452.71. That works out to be a monthly payout of $13,066.71 between the ages of 65 and 80.

The Economic Recovery Act of 1981 includes new retirement plan provisions that can mean tax savings starting in 1982 for virtually every individual in the United States who receives a paycheck. The new law allows taxpayers to deduct from gross income the lesser of $2,000 or 100 percent of their earnings for payments to an IRA. The amount is increased to $2,250 for a taxpayer establishing dual IRAs with a nonworking spouse.

Every individual in the American work force under age 70½ is eligible. It matters not whether a worker is covered under another retirement plan. That means that individuals can participate who are covered by private pension and profit-sharing plans, Keogh plans, government plans, tax-sheltered annuities, or any other type of tax-sheltered plan. Further, IRA contributions can be made by individuals even if they are receiving maximum contributions or benefits under other plans.

As mentioned above, spousal IRAs established by an individual and a nonworking spouse will have an annual contribution limit of $2,250. However, no longer will contributions have to be divided equally between two spouses. As much as $2,000 can go into one of the accounts. Beginning in 1982, a joint return must be filed by a husband and wife to claim the spousal IRA deduction. If both spouses work, they will be able to set aside up to $4,000 per year divided between two separate IRAs.

It's interesting to note that a divorced spouse who participated in a spousal IRA for at least three of the five years preceding the divorce will be allowed to continue to contribute to the spousal IRA. The contribution limitation is $1,125 per year up to 100 percent of compensation and alimony receipts. That should make for some interesting property settlements!

Employee Plans

Owner-employees also can benefit under the new rules. Beginning with the 1982 tax year, the law increases the annual contribution limits to Keogh plans to $15,000. The 15 percent earnings limit on self-employed income remains the same. Thus, if a self-employed individual also adopts an IRA, his/her contribution limit will be $17,000.

Beware of the catch. If the owner-employee takes into consideration compensation above $100,000 (maximum amount is now $200,000) in determining the Keogh contribution, all employees in the plan must receive at least 7½ percent as their Keogh contribution. Such amounts could cause serious cash flow problems during the current recessionary times. The plan, however, can be integrated with social security, thus reducing contributions for employees.

The $15,000 overall limit on deductible contributions applies only to defined-contribution Keogh plans. Older individuals often qualify for higher deductible contributions under defined-benefit Keogh plans. Tax deductions available from defined-benefit plan contributions are doubled as well. Sub-chapter S corporation plans fall under the same increased limits as do the Keogh plans.

Keogh plans and corporate and government pension and profit-sharing plans under the new law can be amended to accept employee contributions that would otherwise be deductible by the employee as IRA contributions. That is $2,000 per year up to 100 percent of compensation and no withdrawal penalty prior to age 59½.

Employers, however, may be reluctant to assume the added administrative burden and investment responsibility for such employee contributions. It may be much less expensive for the employer to simply establish a payroll

deduction system for employee IRAs. Employees would still reap the same tax advantages available through IRAs without the necessity of employers installing a deductible voluntary feature in their qualified plans. Financial institutions, life insurance companies, and mutual funds already have begun making such payroll-deduction plans available to employers.

Distributions from Employer Plans

Partners who own more than a 10 percent interest in a partnership cannot borrow from their Keogh or HR-10 plan without having the payments treated as premature distributions. Such distributions not only are taxed at ordinary income rates but trigger the 10 percent penalty tax as well. The new law eliminates loans without penalty from Keogh plans to partners with less than 10 percent ownership.

Distribution to self-employed individuals from terminated plans now are permitted without imposing the previous five-year law or plan participation. Finally, contributions made by an individual to a Keogh plan in excess of the maximum limit may be withdrawn without penalty before the filing date of the individual's tax return.

The new law also provides that distributions from qualified retirement plans will now only be taxed when received as opposed to when "made available." The latter provision made it possible in the past for the IRS to tax money in plans available for withdrawal upon demand (application of the constructive receipt doctrine). Although plan amendments may be in order to take advantage of this new change, plan sponsors will probably want to await Treasury regulations on the subject prior to any rewrite.

Other Provisions

The dollar contribution limit for Simplified Employee Pension Plans (SEPs) has been doubled beginning in 1982. It is now 15 percent of pay up to $15,000. Since an SEP plan member must open an IRA to receive his/her employer's SEP contribution, this same IRA account also can be used for the employee's own $2,000 annual contribution under the new rules. Thus, the simplicity of the one account for both employer and employee contributions may make the SEP increasingly attractive to small businesses in the future.

Finally, the rules for Employee Stock Ownership Plans (ESOPs) have been changed. Beginning in 1983, an income tax credit based on a percentage of payroll replaces the existing investment tax credit for ESOP contributions. Also scheduled for change next year is the tax treatment of leveraged ESOPs as well as the rules regarding cash distributions from ESOPs.

The primary intent of this brief discourse regarding qualified retirement plans is to convey the extensive changes in the area brought about by the 1981 Economic Recovery Tax Act. Only a few of the more salient points have been recapped for the sake of brevity. Certainly, you will want to discuss these items further with your tax advisor should they affect you.

(Continued from page 25)

Conclusions

Clearly, the public service employment program has met with mixed success. In the Memphis/Shelby County PSE program, the prime sponsor was successful in its efforts to meet the congressional mandate to target PSE jobs toward the economically disadvantaged. The program served as an alternative employment vehicle for nearly 11,000 people between 1977 and 1980 at an average cost of $3,345 per participant. Only a small percentage of PSE employees, however, were placed in unsubsidized employment at the time of termination. PSE job opportunities were for the most part short-term, low-wage, low-skill entry-level jobs. Thus, the long-term ability of the individual PSE participant to move up the skill ladder in the private sector will be less than originally expected.

Even though the placement percentage was low, there were benefits to society which undoubtedly occurred. During their participation in the program, the enrollees were productive, taxpaying members of society. Because of secondary effects on the budget, such as lower outlays for unemployment insurance, food stamps, and other forms of public assistance, the net cost to society was probably low. For those enrollees who were placed, the major benefit was an improvement in earnings.

Additionally, local government, especially city government, was able to provide higher levels of service at little or no additional direct cost. Whether local governments would have provided the same levels of service in the absence of the PSE program is debatable. That local government will have to increase its revenues through local action in order to provide the same level or type of service in the future is not debatable.

---

[1] "The Twin Problems of High Inflation and Stagnant Growth," *America's New Beginning: A Program for Economic Recovery* (Washington, D.C.: U.S. Government Printing Office, February 18, 1981), p. 4-27.

[2] *Tennessee Data for Affirmative Action Plans*, 6th ed. (Nashville: Tennessee Department of Employment Security, 1980).

U. S. CONSUMER PRICE INDEX - U[1] (UNADJUSTED)
1967 = 100.0

Month	1978 CPI	1979 CPI	Percent Change Month Ago	Percent Change Year Ago	1980 CPI	Percent Change Month Ago	Percent Change Year Ago	1981 CPI	Percent Change Month Ago	Percent Change Year Ago	1982 CPI	Percent Change Month Ago	Percent Change Year Ago
Jan.	187.2	204.7	+ 0.9	+ 9.3	233.2	+ 1.4	+13.9	260.5	+ 0.8	+11.7	282.5	+ 0.4	+ 8.4
Feb.	188.4	207.1	+ 1.2	+ 9.9	236.4	+ 1.4	+14.1	263.2	+ 1.0	+11.3	283.4	+ 0.3	+ 7.7
March	189.8	209.1	+ 1.0	+10.2	239.8	+ 1.4	+14.7	265.1	+ 0.7	+10.6			
April	191.5	211.5	+ 1.2	+10.7	242.5	+ 1.1	+14.7	266.8	+ 0.6	+10.0			
May	193.3	214.1	+ 1.2	+10.8	244.9	+ 1.0	+14.4	269.0	+ 0.8	+ 9.8			
June	195.3	216.6	+ 1.2	+10.9	247.6	+ 1.1	+14.3	271.3	+ 0.9	+ 9.6			
July	196.7	218.9	+ 1.1	+11.3	247.8	+ 0.1	+13.2	274.4	+ 1.1	+10.7			
Aug.	197.8	221.1	+ 1.0	+11.8	249.4	+ 0.6	+12.8	276.5	+ 0.8	+10.9			
Sept.	199.3	223.4	+ 1.0	+12.1	251.7	+ 0.9	+12.7	279.3	+ 1.0	+11.0			
Oct.	200.9	225.4	+ 0.9	+12.2	253.9	+ 0.9	+12.6	279.9	+ 0.2	+10.2			
Nov.	202.0	227.5	+ 0.9	+12.6	256.2[a]	+ 0.9[a]	+12.6[a]	280.7	+ 0.3	+ 9.6			
Dec.	202.9	229.9	+ 1.1	+13.3	258.4	+ 0.9	+12.4	281.5	+ 0.3	+ 8.9			
Annual Avg.	195.4	217.4[a]			246.8			272.4					
Annual Change	--	11.4%			13.5%			10.4%					

[1]The Consumer Price Index for All Urban Consumers reflects the buying habits of about 80 percent of the non-institutional civilian population of the U.S. and also uses a market basket based on the 1972 and 1973 expenditure survey.

[a]Revised.

Source: U.S. Department of Labor, Bureau of Labor Statistics.

Prepared by: Bureau of Business and Economic Research, Memphis State University.

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INDEXING THE FEDERAL INCOME TAX

Alternatives and Implications

*Richard Fern**

As incomes have increased in response to the 145 percent rise in the Consumer Price Index since 1967, the U.S. Treasury has received a revenue windfall. The progressiveness of the tax system has become increasingly apparent to taxpayers as their purchasing power has declined while their taxes have increased as a percentage of income. Many current tax provisions (brackets, deductions, exemptions, etc.) are specified in fixed dollar terms, and their effects can be seriously eroded with increases in the price level. A 1972 study found a 0.6 average elasticity of income tax rates to inflation—taxes rise by 16 percent for every 10 percent rise in prices.[1] And a recent study by the Congressional Joint Committee on Taxation found government tax revenues rising by 1.65 times the rate of increase in the cost of living.[2] The net effect is a tax increase from inflation rather than legislative action, which should be of concern to all taxpayers.

This article analyzes recent inflationary tax effects, evaluates the indexing features of the recently revised tax laws, and looks at their prospects for implementation in 1985.

Legislative History

While legislators in the United States have been debating some sort of indexing system for many years, with no action taken, other countries have implemented various forms of it. In 1974, Brazil installed a monetary correction method to adjust personal allowances, exemptions, and tax brackets; Canada indexes tax rates, exemptions, and allowances based on the Consumer Price Index (1972 is the base year); and Great Britain changes personal allowances each year by an amount as least as great as the Retail Price Index change.[3]

There have been several congressional attempts to address this problem, but broad support has been lacking. In 1974, Senator James Buckley of New York introduced a Cost of Living Adjustment Act (S 3396, 93rd Congress), and similar legislation was introduced in 1975 in the House of Representatives (HR 231, 94th Congress). Neither bill met with much success. The most recent attempt was a January 1981 Tax Equalization Act (S1) introduced by Senator Robert Dole, which would reflect rises in consumer prices in personal tax rates, personal exemptions, and the zero bracket amount.

Congress's past reluctance to legislate such changes could be due to several factors. "The major argument for indexing is that the increases in effective income tax rates are unintentional by-products of inflation. Total tax receipts rise faster than incomes and the public sector grows more rapidly than it would in a noninflationary situation."[4] The tax burden is not legislated but merely the result of inflation. "On the other hand, indexing would reduce the built-in stabilizing effect of the income tax during periods of inflation."[5] Reducing demand through progressive tax rates supposedly helps reduce inflation, but recent experience indicates this is not always effective.

At long last, Congress implemented indexation when Senator Dole's proposals were included in the Economic Recovery Tax Act (ERTA) of 1981. Beginning in 1985, individual tax brackets, personal exemptions, and zero bracket amounts will be adjusted to changes in the Consumer Price Index (CPI). The implications of this for taxpayers can best be examined by looking at the effects on past years.

Recent Experience

Individual taxpayers pay income taxes on a base amount called taxable income. This is gross income adjusted for business expenses, personal deductions, personal exemptions, etc. These adjustments to gross income have evolved as Congress has tried to legislate away inequities (e.g., large medical bills), provide benefits to specific groups (e.g., interest deductions), or achieve various social reforms through the income tax system (e.g., charitable contribution deductions). Through the interaction of the adjustments, exclusions, deductions, and exemptions, the inflation-generated "bracket creep" affects taxpayers in different ways, and obviously some are affected more than others. Thus a discussion of taxes on inflation income will be general, since the effects are not uniform, and will initially examine the effects on taxable income.

The so-called bracket creep refers to a phenomenon inherent in any progressive tax system. As individual incomes rise (whether from inflation or not), people with the same, or even reduced, purchasing power pay higher rates of tax on that income. Salary increases come from inflation gains and real gains, but the tax system has not distinguished between the two. Taxes are paid on income "from whatever source derived,"[6] including rising price levels. And the situation is expected to get worse. A recent study by *Business Week* compiled data showing that in 1981 a family with income of $30,000 paid 19.3 percent of that as federal income and social security taxes. With continued inflation, that effective tax rate will rise to 22.5 percent in 1984. For a family in the $10,000 bracket, the effective rate will rise from 9.9 percent to 13.9 percent.

**CPA and Accounting Instructor, University of Louisville, Louisville, Kentucky.*

And for the $50,000 bracket family, the increase is from 21.8 percent to 26.8 percent.[7]

A specific example will help illustrate this. Table 1 compares the 1974 Tax Rate Table for Married Persons filing a joint return to the same table adjusted through 1980 according to changes in the average CPI-U (Consumer Price Index for all Urban Consumers; 1967 = 100.0; average for 1980 = 244.7). (While any base period could be chosen, the mid to late 1970s had significant price-level increases, which makes these years particularly relevant to this discussion.) The primary purpose of indexing the tax tables is to keep all taxpayers in their current bracket unless wage increases outstrip price-level increases. And so while both taxable income and tax liabilities increase in the inflation-adjusted table, the marginal tax rate (percentage on excess) and effective tax rate (tax liability ÷ taxable income) remain stable. The individual (or couple) is remitting more tax dollars but each dollar's purchasing power is less.

Table 1

COMPARISON OF 1974 TAX RATE AND INFLATION-ADJUSTED (THROUGH 1980) TAX RATE

1974			Inflation-Adjusted[1]		
Taxable Income	Tax	Percent on Excess	Taxable Income	Tax	Percent on Excess
$ ____	$ ____	14	$ ____	$ ____	14
1,000	140	15	1,657	232	15
2,000	290	16	3,314	481	16
3,000	450	17	4,971	746	17
4,000	620	19	6,628	1,027	19
8,000	1,380	22	13,256	2,287	22
12,000	2,260	25	19,884	3,745	25
16,000	3,260	28	26,512	5,402	28
20,000	4,380	32	33,140	7,258	32
24,000	5,660	36	39,768	9,379	36
28,000	7,100	39	46,396	11,765	39
32,000	8,660	42	53,024	14,350	42
36,000	10,340	45	59,652	17,133	45
40,000	12,140	48	6,280	20,116	48
44,000	14,060	50	72,908	23,297	50
52,000	18,060	53	86,164	29,925	53
64,000	24,420	55	106,048	40,464	55
76,000	31,020	58	125,932	51,400	58
88,000	37,980	60	145,816	62,933	60
100,000	45,180	62	165,700	74,863	62
—	—	—	—	—	—

[1]165.7 percent increase in average CPI-U between 1974 and 1980.

Table 2 compares the tax liability of a married couple for four levels of taxable income from three tax computation tables. The differences between A and B show the extra tax this couple would have paid in 1980 due to inflation-induced bracket creep. The reduced tax at the $5,000 level occurs because of the initiation of the zero bracket concept in 1977 and the increase to $3,400 in 1979. But at all other taxable income levels the difference is a tax increase. At $40,000, inflation causes an 8 percent tax increase, while at $60,000 there is a 14 percent increase.

The tax amounts in C indicate what the couple would have owed in 1980 if the 1974 tax tables had not been revised. The increased zero bracket amounts and widened tax brackets in the late 1970s were Congress's attempts to accomplish inflation-tax reform on a discretionary basis. While not eliminating the bracket creep for this seven-year period, the efforts had some effect: a $2,622 tax effect at the $60,000 level ($22,300 less $19,678) and a $1,914 effect at the $40,000 level ($12,140 less $10,226).

Table 2

COMPARISON OF TAX LIABILITY FROM THREE TAX COMPUTATION TABLES

Tax Computation Table	Taxable Income			
	$5,000	$40,000	$60,000	$100,000
(A) 1974 Inflation-Adjusted Table	$ 751	$ 9,465	$17,290	$ 37,259
(B) 1980 Tax Rate Schedule Y	324	10,226	19,678	41,998
Increased (Reduced) Tax	(327)	761	2,388	4,739
(C) 1974 Tax Table	$ 810	$12,140	$22,300	$ 45,180

Rather than indexing the tables to the CPI, a proposed alternative was the GNP Deflator, which rose from 114.9 in 1974 to 177.4 in 1980. This 54 percent increase (versus the CPI-U 65 percent increase) would yield an inflation-adjusted tax on $60,000 of 1980 taxable income of $17,976 (compare to Table 2). Since the Deflator is a much broader measure of the economy's prices, it is not as subject to temporary changes, and indexing the tax tables to it would typically give higher taxes than under a CPI adjustment.

If any one reform was needed to adjust personal taxes for inflation, indexing the tax schedules to a relevant index was foremost. While this would not eliminate all inflation effects by itself (as will be seen later), it is the adjustment with the most significant influence. The CPI-U would appear to be the best index due to its wide application and ready availability, while the GNP Deflator would closely approximate those results.

Indexing under ERTA, beginning in 1985, will be based on the increase in CPI over the most recently completed calendar year. This is the approach suggested by the American Institute of Certified Public Accountants (AICPA)[8] and seems to be the most practical. The IRS is to generate the adjusted tax tables and schedules by December 15 of the preceding tax year, which indicates the reflected CPI change will not be for a full calendar year or else will be for a 12-month period ending December 15 (a minor distortion).

Personal Exemptions and Zero Bracket Amounts

Inflation's effect on taxable income is direct and easily eliminated through an indexed tax schedule. But inflation's effect on some of the components of taxable income (exemptions and deductions) is not eliminated merely through an indexed table. Additional adjustments are needed.

"The basic justification for the personal exemption is that people with low incomes have no taxpaying capacity.

Taxation below minimum levels of subsistence reduces wealth and efficiency and results in lower economic vitality, less production, and possibly higher public expenditures for social welfare programs."[9] Thus, society's moral and economic duty is to keep the very lowest income levels off the tax rolls. At the lower income levels the personal exemption serves mainly to exclude taxable income, while at the higher income levels it differentiates the tax burden based on family size and number of dependents.[10]

How are the low income earners faring in the wake of recent inflation? Not very well, it seems! The personal exemption of $600, initiated in 1948, has gradually increased to $1,000 for 1980. Meanwhile, the CPI has risen to a 244.7 average from 72.1 in 1948. If the personal exemption had kept pace with the price-level increase, the $600 in 1948 would currently be $1,436. Although the intent of the exemption was nontaxability of below-poverty income, the result is increasing taxation of income at those levels. Congress has tried to compensate for this with the 1975 and 1976 $30 per-capita tax credit and low income allowance concept. But in terms of personal exemption alone, inflation has distorted its purpose by subjecting monetary income to taxation with no increase in real income.

The intention of the original personal exemption has been increasingly accomplished through the minimum standard deduction (low income allowance). Over the past 15 years the standard deduction and zero bracket amounts have been used to adjust minimum taxable income levels. The standard deduction was replaced with a zero bracket amount and incorporated into the tax schedules in 1977. The concept is the same, however: allow taxpayers a fixed dollar amount of deductions to subtract from adjusted gross income in determining taxable income. Thus, even the recent increase to $3,400 does not compensate for changes in the CPI. The irony is that the lower income taxpayers, who use the zero bracket amount the most, are the ones most adversely affected. Those who itemize their deductions can deduct the actual dollar outlay (with various restrictions), while those who are forced to use the fixed, maximum amount are at the mercy of the price-level changes. When gross income increases and deductions are fixed, taxable income necessarily increases. Without inflation adjustments to the zero bracket amounts, price increases will reduce the progressiveness of the tax structure by raising real tax rates more on adjusted gross income at the lower levels.[11] And even if the tax schedules are indexed to price changes without adjustment of the fixed deduction limit, the effective tax rate rises also.

Table 3 compares a $10,000 taxable income of a married couple in 1950 with 1980 inflation-increased income under 1980 tax rules and after adjusting the personal exemption and zero bracket amount for changes in the CPI since 1950. The largest difference is in the personal exemption adjustment, since Congress has attempted to correct inequities through the zero bracket in recent years. The difference in the 1980 taxable incomes is relatively small but illustrates the point that fixed dollar amounts used in determining taxable income over recent years would have caused some bracket creep even if the tax tables had been inflation-adjusted.

Table 3

COMPARISON OF 1950 AND 1980 TAXABLE INCOMES BEFORE AND AFTER INFLATION ADJUSTMENT

		1980	
	1950	1980 Rules	Adjusted
Adjusted gross income	$10,000	$33,929[a]	$33,929[a]
Personal exemptions (2)	(1,200)	(2,000)	(4,068)
Zero bracket amount (standard deduction)	(1,000)	(3,400)	(3,394)
Taxable income	$ 7,800	$28,529	$26,467

[a]Adjusted for change in CPI-U.

Other Fixed Dollar Limits

To completely eliminate the tax effects of inflation, all fixed dollar amounts in the tax laws should be indexed, not just the two previously mentioned. Among those included would be the $150 medical insurance premium amount not subject to the 3 percent test and the $100 dividend exclusion.

One-half of medical insurance premiums, up to $150, is an itemized deduction, with the remaining one-half subject to the 3 percent of adjusted gross income test. The rise in medical insurance costs causes a smaller percentage of such expenses to be an automatic deduction and a larger percentage to be included with other medical items. Since this $150 limit was introduced in 1967, it has effectively been reduced 52 percent by inflation.[12] Additionally, the 3 percent and 1 percent of adjusted gross income minimums operate to the taxpayer's disadvantage whenever the prices for medical care increase faster than the CPI-U under an inflation-adjusted tax system. (For example, the CPI for medical care increased 119 percent between 1970 and 1980, while the CPI-U increased 110 percent.) The costs are rising faster than the minimum allowable amount, and a smaller proportion will be deductible. Conversely, the taxpayer receives an advantage when total consumer prices increase more rapidly.

For taxable years prior to 1981, taxpayers were allowed a $100 exclusion from income for dividends of qualified, domestic corporations. Since 1970, a CPI-U adjusted exclusion would be $210, or a $420 exclusion on a joint return with both individuals having qualifying dividends. Or, in other terms, inflation has eroded its value by 56 percent since enactment in 1964, making the exclusion worth $44 in purchasing power.[13] Since the intent of the exclusion was to encourage corporate investment, not adjusting the maximum amount serves to defeat its purpose.

Approaching the situation from a stop-gap viewpoint in the Crude Oil Windfall Profit Tax Act of 1980, Congress increased the exclusion to a maximum of $200 of dividends and interest for each taxpayer beginning in

1981. While the added interest exclusion will please many taxpayers, the problem of piecemeal tax changes still remains. The inflation portion of dividend and interest income greater than $200 will still be treated as taxable income and subject to higher rates. And the ERTA of 1981 repealed this provision, returning to the $100 dividend-only exclusion in 1982, which exacerbates the problem.

Among the other fixed dollar amounts in the tax code, and the inflation effects since their enactment through March 1979, are:[14]

Death Benefits: Section 101, introduced in 1954, excludes $5,000 of employee death benefits from gross income. This amount has never been revised, and inflation has effectively reduced the benefit of the exclusion by 62 percent (an effective exclusion of $1,900).

Group Term Life Insurance: Section 79, introduced in 1964, provides that an employee need not include in gross income the cost of $50,000 of group term life insurance provided by an employer. The amount has never been adjusted and is effectively reduced by 56 percent by inflation to $22,000.

Casualty Loss: Section 165(c)(3), introduced in 1964, limits casualty losses of individuals to amounts in excess of $100. This amount has never been adjusted, resulting in a 56 percent effective reduction. Here inflation benefits the taxpayer using the provision.

Moving Expenses: Beginning in 1970, Section 217(b)(3)(A) allowed a $1,000 deduction for certain moving expenses. This limitation was raised to $1,500 in 1977. In spite of that increase, inflation eroded 17 percent of the 1977 deduction.

The AICPA indexation policy recommends applying inflation adjustments to the following individual tax provisions:

Limits on the amount of earned income eligible for the earned income credit

Limits on the amount of income eligible for elderly tax credits; the $10,000 exemption from the maximum tax

The $1,500 and $1,750 limits on annual contributions to an individual retirement account

The $7,500 limit on annual contributions to a self-employed individual's pension

The $3,000 limitation for capital losses which can offset ordinary income

Since the AICPA report, the ERTA of 1981 has raised the individual retirement contributions limit to $2,000 ($2,250 for spousal plans), and the limit for self-employed individuals' pension contributions was raised to $15,000.

Capital Gains and Losses

Individual taxpayers are allowed a deduction from gross income of 60 percent of any net capital gains and are allowed to reduce ordinary income by 50 percent of any net long-term capital losses up to $3,000. These rules have been in effect since the later 1970s and amended the 50 percent long-term gain deduction and $2,000 loss deduction limitation that had remained relatively stable since the mid-1940s (raised from $1,000 to $2,000 in 1977). The preferential tax treatment of capital gains has been part of the U.S. tax system since 1921, when such income was originally allowed to be separated from ordinary income and taxed at 12½ percent.[15]

Despite such liberal treatment, inflation's effects seriously distort the tax benefits.

> Capital gains cannot be treated on par with current income flows when measuring income during a period of rising prices. An asset does not give the owner command over additional resources until the value of the asset exceeds its purchase price at prices prevailing when the asset is sold. Thus to measure the income from appreciated assets, the portion of the capital gain that results from inflation should be deducted from the nominal capital gain.[16]

The asset's basis could be adjusted for any price-level changes (conversion factor = current index/original index) since the date of purchase, and only the difference between that amount and the sales price would be subject to taxation using current rules.

Table 4 shows the effect of using a "floating basis"[17] in determining capital gains and losses. The schedule shows the recognized gain (loss) from selling 500 shares of TNT stock for $31 each in 1970 and 500 shares at $40 each in 1980 when the 1,000 shares were purchased for $22 a share in 1960. The changes in taxable gains or losses are rather dramatic. The 1970 taxable gain drops by 76 percent, while the 1980 gain is converted to a loss. The effects shown are illustrative of the universal effect of inflation-adjusted asset basis on capital gains in an inflationary economy—it will reduce all gains and increase all losses.[18] The benefit to the taxpayer is elimination of taxes on purely inflationary appreciation.

Table 4
COMPARISON OF REGULAR AND INDEXED-BASIS CAPITAL GAINS

	Regular		Indexed-Basis	
	1970	1980	1970	1980
Sales price	$15,500	$20,000	$15,500	$20,000
Basis	11,000	11,000	14,423	30,346
Gain (loss)	4,500	9,000	1,077	(10,346)
Tax deduction	2,250	5,400	539	6,000
Taxable gain (loss)	$ 2,250	$ 3,600	$ 538	($ 4,346)[a]

[a]Loss carryover to 1981.

In 1973, the Tax Equity Act was introduced in Congress (HR 1040, 93rd Congress). It proposed excluding any gain on sale or exchange of capital assets of 4 percent of the basis for each year held over one year up to a maximum exclusion of 60 percent. No legislation to this effect has been passed to date.

Gains on sales of personal residences are affected similarly, and as the AICPA suggests, the $100,000 once-in-a-lifetime exclusion for those 55 and over should also be adjusted for inflation. The increase in the exclusion limit from $20,000 to $100,000 during the 1970s has more than compensated for the price-level change over that period. And the increase to $125,000 under ERTA should

help offset inflationary gains in the short term. However, consideration should be given to indexing residence bases to eliminate the need for future discretionary changes.

Conclusion

The passage of ERTA in 1981 was Congress's reaction to the electorate's dissatisfaction with past fiscal policy. The three-year, 25 percent tax reduction and the indexed structure were an attempt to reduce an ever-increasing, nondiscretionary tax burden.

The supply side theorists of the current administration maintain that reduced taxes increase work incentives and productivity. The 25 percent tax cut is their main tax proposal. However, recent studies by the *Washington Post's* John Berry and the Treasury's Office of Tax Analysis show that the 30 percent proposed reduction (based on the original tax-cut measure) coupled with bracket creep for the next three years will leave Americans paying income and social security taxes at about the same rate in 1984 as in 1980. In fact, only for families earning less than $25,000 or more than $60,000 will the marginal tax rate be noticeably smaller.[19] Thus, even this tax reduction will not offset inflation-induced tax increases for most taxpayers. Even so, the same reduction would be needed in 1984 to offset inflation through 1987. Indexing, to begin in 1985, is the best means of coping with this problem.

The main arguments against indexing federal income taxes include: discretionary changes have had similar effects, it would indicate a surrender to inflation, and it would add unnecessary complications to the tax code.[20] Piecemeal approaches to tax reform have not continuously protected taxpayers and very likely will not do so in the future. Past changes have, at best, only reduced the tax increase of inflation, not reduced taxes. The tax system is based on the ability to pay, but as previously discussed, the equity features (especially for lower income levels) are perverted by inflation. As discretionary changes are enacted, tax distribution is affected, with the original intention of many tax provisions negated. Such distortion does not occur under indexation.

The argument that tax indexing is a surrender to inflation seems to be without much empirical or logical support.[21] Taxpayers confront inflated prices daily and indexing just one of their many expenditures will not make them forget the problem. On the contrary, consumers can fight demand-induced inflation through delaying purchases or buying substitute goods. They cannot, however, do the same with their income taxes. Removing the inequity of this nondiscretionary expenditure can increase the confidence in government's ability to protect its citizens.

The notion that indexing will add unnecessary complications to the tax code is somewhat absurd. As mentioned previously, indexing the tax tables and the fixed dollar allowances can be accomplished in a straightforward manner, as Congress has legislated. Taxpayer compliance will be as before; only the tables and dollar limits used will change annually. Even so, when in the past has the complexity of a tax provision prevented its enactment? (As O'Brien and Menikoff note, indexing could actually reduce complexity by reducing the need for discretionary changes which often complicate current provisions.)

The strongest AICPA argument for indexation is that it "would enable voters to identify responsibility for their taxes and to hold elected officials accountable for tax increases."[22] Such political accountability is both the taxpayer's need for and the legislators' argument against such a reform.

The proposed budget deficits (OMB estimate of $102 billion in 1982) will make Congress reflect on the indexation provisions of ERTA many times before 1985. Indexation is the best way to maintain the original purpose of many tax provisions and keep tax equity intact. But this much-needed tax reform may never be implemented, since it is usually considered more expedient to eliminate symptoms rather than cure illnesses.

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[1]George M. Von Furstenberg, "Individual Income Taxation and Inflation," *National Tax Journal*, March 1975, p. 117.

[2]American Institute of Certified Public Accountants, "Implementing Indexation of the Tax Laws," *Statement of Tax Policy* 9 (1981): 3.

[3]William C. Penick, "Tax Impact of Inflation: A World-Wide Concern," *Tax Executive*, January 1981, p. 100.

[4]Joseph A. Pechman, *Federal Tax Policy*, 3rd ed. (Washington, D.C.: The Brookings Institution, 1977), pp. 105-6.

[5]Ibid., p. 106.

[6]*Internal Revenue Code of 1954*, Sec. 61(a).

[7]Ernest Corine, "Biggest Increase in Living Costs Is Traceable to Taxes on Income," *The Courier-Journal*, May 7, 1981, p. A17.

[8]The AICPA recommended the following adjustment procedure in their *Statement of Tax Policy*: 3rd Quarter, 1979, CPI 200; 1980, 220; 1981, 250. Assuming that indexation began in 1980 and using 1980 as the base year, marginal tax brackets for 1981 would be determined by adjusting the 1980 marginal tax brackets by the percentage increase in the CPI from 1979 (200) to 1980 (220), which is 10 percent (20/200). Marginal tax brackets for 1982 would involve adjusting the 1980 marginal tax brackets by 25 percent (50/200). The inflation factor would then be applied to the upper and lower boundaries of each marginal income tax bracket. (This procedure was used to compute the amounts in Tables 1 and 2.)

[9]Pechman, p. 74.

[10]Ibid.

[11]Von Furstenberg, p. 122.

[12]Kevin J. O'Brien and Jerry A. Menikoff, "Aspects of Indexing Taxes for Inflation," *Tax Notes*, January 1980, p. 10.

[13]Ibid., p. 59.

[14]Ibid.

[15]Roy G. Blakey and Gladys Blakey, *The Federal Income Tax* (London: Longmans, Green & Co., 1940), p. 219.

[16]Pechman, p. 11.

[17]Henry R. Cheesemen, "How to Create an Inflation Neutral Tax System," *The Journal of Accountancy*, August 1975, p. 50.

[18]Ibid.

[19]Jane Bryant Quinn, "The Tax-Cut Lottery," *Newsweek*, May 11, 1981, p. 67.

[20]O'Brien and Menikoff, p. 61.

[21]Ibid.

[22]AICPA, p. 5.

MARKETING THE NINE-DIGIT ZIP CODE

*James Mitchell and C. L. Abercrombie**

In 1976 the U.S. Postal Service found itself facing problems that every business organization encounters at one time or another in its life cycle. The problems were, "How do we maintain our share of the market, provide the type of service demanded by the market, and keep the cost of doing business to a minimum?"

A task force was created for the express purpose of reviewing the present operation to find ways to combat rising cost and process mail more efficiently and to make recommendations for future changes in the system.

Presently, the Postal Service delivers mail with the aid of an address and five-digit Zip Code. Each piece of mail is processed mainly by using manual labor. After studying this system, the task force found that changes in the Zip Code configuration along with the aid of modern technology could solve many of the problems.

During the study made by the task force, many Zip Code configurations were considered. These ranged from all alpha characters and combinations of numeric and alpha characters to increasing the number of numeric characters used in the Zip Code. After exhausting every possible avenue, the task force determined the five-plus-four-digit Zip Code offered the largest number of combinations, thereby allowing for expansion in each existing zone.

Once the task force completed its study, the Postal Service decided the nine-digit Zip Code with the aid of modern technology could provide the type of service demanded by the consuming public at the lowest possible cost.

The Nine-Digit Zip Code

In 1978 the U.S. Postal Service made a public announcement stating its intention of expanding the present five-digit Zip Code to nine digits. To understand the reasons the Postal Service made this decision, it is necessary to have an understanding of how the five-digit and nine-digit Zip Codes work.

Five-Digit Zip Code

Under the present system, the five-digit Zip Code breaks mail down into delivery areas like a local post office in a small town or stations or branches of a local post office in a large metropolitan area. For example, all businesses and residents in Germantown, Tennessee, have the same Zip Code of 38138. In a larger city like Memphis, Tennessee, there are a number of Zip Codes. For example, businesses and residents of the Whitehaven area have a Zip Code of 38116, while businesses and residents of the Raleigh area are 38128.

Once mail is sorted to one of these Zip Codes, a further separation is needed before the mail reaches the letter carrier. This separation is made based on the street address. Under the present system, the final sortation to a letter carrier is made by clerical employees, who are required to memorize the name of every street in a particular Zip Code area and the carrier routes in that area. Because of this last sortation to a particular carrier, the cost of handling mail is greatly increased.

Once the nine-digit Zip Code is implemented by the Postal Service and used by customers, this particular step in moving mail will be eliminated by using modern technology. Instead of employees having to memorize the names of a large number of streets and carrier routes, machines will be used to read the new nine-digit Zip Code and sort the mail to the proper letter carrier.

Nine-Digit Zip Code

To understand the nine-digit Zip Code, it is necessary to understand the four-digit add-on Zip Code. The four-digit add-on is divided into two groups called segments and sectors. The main factors used to establish segments and sectors are mail volume and street blocks in a given area. In using these factors, the Postal Service will then assign new four-digit add-on Zip Codes to business customers, buildings, apartments, post office mailbox sections, and residential areas.

A segment in the nine-digit Zip Code is the last two numbers in the code. A segment consists of any one of the following: one or both sides of a street between intersections, a firm, a building, or a firm within a multifirm building, a floor or group of floors within a building, a post office box or a group of boxes, a cluster of apartment boxes, and any other delivery point or grouping indicated by sound management judgment.

Once the Postal Service has identified all segments in a particular zone, these segments are grouped into sectors. Each sector consists of a maximum of 100 segments numbered from 00 to 99. Sectors are denoted by the first two numbers of the new four digits added to the present Zip Code.

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The size of a sector is determined by the volume of mail delivered in each zone. Commercial zones are generally smaller than residential or mixed zones. In some cases where a building or a city block has its own unique Zip Code, more than one sector may be required. For example, if a city has more than 100 businesses within the area and each business qualifies for a separate nine-digit Zip Code, a second sector is assigned to the block. In each case of this type, enough sectors are assigned to allow for future growth.

Marketing the Nine-Digit Zip Code

Once the new nine-digit Zip Code was decided upon as the system needed to provide better services to the consumer, the Marketing Department of the Postal Service began planning the marketing strategies needed to sell the new service to its customers.

To accomplish this goal, it was necessary to consider the following questions: Who are the customers? What are the limitations of the nine-digit Zip Code? What benefits does the system have to offer the customers? What changes must the customer make if the nine-digit Zip Code is to be successful? After researching these questions, the Postal Service found the following answers to these questions.

The primary target customers were found to consist of three basic categories: commercial mailers, government mailers, and consumers. Commercial mailers consisted of a diverse group of businesses ranging from the smallest one-person office to the largest civilian employer of over 500,000 persons. Government mailers included all government agencies at all levels, from municipal to county, state, and federal. Consumer mailers included every resident of every household in the United States.

The Postal Service found that the limitations of the new nine-digit Zip Code were: The expense of conversion for large mailers would be very high and the Postal Service did not have any incentives for these customers; there were few customer benefits for the general mailing public; and the Postal Service had not begun development of a Zip Code information system.

To compensate for the limitations, the Postal Service needed to emphasize mailer benefits. The Postal Service wanted to emphasize the fact that the nine-digit Zip Code was a better way to process the huge volume of mail. Once the new nine-digit Zip Code was in use, the Postal Service could improve productivity, hold down postal cost, and improve mail service through fewer manual handlings, which cause more errors in delivery.

The final question was, "What changes must the customer make if the nine-digit Zip Code is to be successful?" The Postal Service found that customers must begin to use the nine-digit Zip Code everywhere their addresses appear. They must be converted to using the nine-digit Zip Code on all outgoing correspondence and must update and evaluate the readability of their address.

Once these questions were researched, the Marketing Department of the Postal Service began planning the marketing strategies needed to sell the new service to its customers. One of these sales strategies was to make initial calls on key customers. Key customers were determined by breaking large mailers into industry types. Once contact was made, Postal Service salespeople were to get support from these mailers in using the nine-digit Zip Code.

Research

The main purpose of this study was to determine if the Postal Service has succeeded in informing customers about the nine-digit Zip Code and if it has conveyed to the customers the benefits of the Zip Code as perceived by the Postal Service. It was beyond the scope of this study to determine how effective all the marketing strategies have been on all segments of the customer population. Therefore, the researchers looked at only a few areas of the marketing strategy and focused on the business segment of Memphis, Tennessee.

After discussing the different data gathering techniques with statisticians at Memphis State University, the researchers decided to use the mailed questionnaire as a market research instrument, since it was the most appropriate data gathering technique for a study of this nature.

The questionnaire was mailed to a small sample of representative business mailers to determine:

1. Whether they had heard of the new nine-digit postal Zip Code
2. Where they received the information
3. Whether each business mailer planned to utilize the new Zip Code, and if not, why not
4. How soon each mailer intended to start using the new Zip Code
5. How many firms believed this new Zip Code would help process mail faster and more efficiently

Once the questionnaire was devised, a mailing list of 400 business organizations in Memphis, Tennessee, was obtained from the Memphis Post Office. A decision maker's name was provided with each business address. The list was categorized into three groups of business mailers, based on annual postage expenditures. The first group was classified as major volume mailers ($50,001 and up). The second group was classified as medium volume mailers ($10,001 to $50,000). The third group was classified as small volume mailers ($10,000 or less).

After the mailing list was obtained, an explanatory cover letter and a two-page questionnaire accompanied by a business reply envelope were sent to the business organizations. A sample of 400 was considered adequate to draw reliable conclusions from the data analyses.

The majority of responses to the mail questionnaire were received within three weeks of the mailing date of January 7, 1981. Within five weeks, 184 questionnaires were returned, of which 179 contained usable data. This was a response rate of 44.75 percent.

(Continued on page 14)

JAPANESE MANAGEMENT

Pursuing the Last Grain of Rice in the Corner of the Lunchbox

*Thomas R. Miller and J. Bernard Keys**

Within the last decade a host of books and articles have addressed the mystique of Japanese management. The opinion is often expressed that Japanese management is, or at least appears to be, superior to American management. This proposition has been the subject of intensive inquiry by both the academic and the executive community. In their efforts to unlock this mystery, researchers have identified a multitude of factors alleged to account for the excellence of Japanese management. Perhaps the most striking finding of a review of the literature is the writers' disagreement over the reasons for this success.

In trying to sort out the various explanations, one is reminded of Elias Porter's classic "Parable of the Spindle."[1] Porter imagined that the president of a large chain of short-order restaurants had called in a team of experts to solve the human relations problems which plagued his business. So it came to pass that the president met one morning with the specialists, a sociologist, a psychologist, and an anthropologist. He quickly outlined the problems to these learned men with the hope that they might arrive at an interdisciplinary solution: Why do waitresses break down in tears? Why do cooks walk off the job? Why do managers get upset and fire employees on the spot?

After studying the problems the experts returned with their analyses and recommendations. Focusing on the stress problem that occurred during the rush hours, the sociologist found it significant that lower status persons (waitresses) were giving orders to higher status persons (cooks). In order to break up this face-to-face relationship, he recommended that a spindle be place on the order counter so that cooks did not have to receive orders shouted directly at them by the waitresses. The psychologist also recognized that the problems surfaced in the rush hours, but his interpretation was different. Psychologically speaking, he said, the manager is the father figure, the cook is the son, and the waitress is the daughter. Since our culture does not permit daughters to give orders to sons, something was needed to break up the face-to-face interaction between the waitresses and cooks. Perhaps a kind of wheel on a shaft with clips on it for orders should be on the counter. Finally, the anthropologist presented his findings, noting that the stress problem occurred during the rush hours. This expert claimed that different value systems were at the heart of the matter. On the one hand, the cooks hold as a central value the continued growth and development of the restaurant organization. The waitresses, on the other hand, usually care little about the total organization as long as the restaurant is a decent place to work, since most waitresses work only to supplement the family income. Thus, management must find a way to break up the face-to-face contact between cooks and waitresses. He offered the suggestion that a shaft with a wheel and clips spaced a few inches apart should be placed on the counter.

After the scientists left, the president convened his top staff and spoke to them: "Gentlemen, it's clear that these men don't agree on the reason for the conflict, but all have come up with the same basic idea about the spindle. Let's take a chance and try it out."

A similar pattern seems to be occurring in the work of American management experts who are examining Japanese management. A review of the literature reveals six major themes describing the reasons for Japanese management success. This article examines these six themes and concludes with an attempt to identify the Japanese "spindle."

The Executive Style Theory

Richard Pascale and Anthony Athos utilize in their research the framework of seven management variables developed by the McKinsey Company.[2] The seven variables of "S's" are superordinate goals, strategy, structure, systems, staff, skills, and style. These are the "levers" of organizational and management functions with which executives can influence large complex organizations. Superordinate goals function as the unifying elements that tie together the various activities and interests of organization members.

According to Pascale and Athos, the remaining variables can be conceived of as "hard S's" and "soft S's." The hard S's, presumably the more impersonal and institutional factors, are strategy, structure, and systems. In contrast, the soft S's, dealing more with human values and interpersonal issues, are staff (the concern for having the right sort of people to do the work), skills (training and developing people to do what is needed), and style (the manner in which management handles subordinates, peers, and superiors). The authors' chief research instrument is interviews and observations of the styles of chief executive officers in the United States (IT&T) and Japan (the Matsushita Corporation).

Pascale and Athos maintain that the management styles are very similar on all the hard S's of strategy, structure, and system, but Japan has advantages in the soft

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S's of staff, skills, and style. These advantages stem largely from the Japanese culture, which differs from American culture in its approach to ambiguity, uncertainty, and imperfection, and in its approach to interdependence.[5] The authors discuss at length how the Japanese manager in communicating with others has learned to make the most of ambiguity, indirection, subtle cues, trust, interdependence, uncertainty, implicit messages, and management of process, as opposed to the U.S. managerial norm of striving for complete openness, explicitness, and directness in order to minimize ambiguity and uncertainty. In contrast to the American tradition of independence, Pascale and Athos suggest the Japanese tradition of interdependence (based on limited space and the technology of rice farming) promotes worker acceptance of organizational performance rather than individual performance as the valued goal. The differences in approach to these areas of life have in turn caused the Japanese to focus more careful attention on their human resources and encourage a higher degree of effective collaboration in superior-subordinate relationships. With the norm of long-term relationships between the employee and the firm, the superior functions as a coach, not only instructing the employee in skills required for the job but also reinforcing the superordinate goals and the philosophy of the organization. The authors do not reconcile how they are able to find American firms with the same highly developed sophistication in the soft S's in a totally different culture.

The Organizational Theory

William Ouchi summarizes his work in what has become the best selling and most popular book in Japanese management, *Theory Z*.[4] Interestingly enough, Ouchi began his research in the same fashion as and jointly with Pascale but decided to terminate his data gathering earlier and write his book first. Instead of focusing on the differences in the styles of leaders of key organizations in the United States and Japan, Ouchi focuses (at least in his writing) on the organizations themselves. He first describes the ideal Japanese organizational model, which he uses as a "foil" against which to compare and understand the American model. An outline of the two models is presented in Table 1.

Table 1

THE CONTRAST

Japanese Organizations	American Organizations
Lifetime employment	Short-term employment
Slow evaluation and promotion	Rapid evaluation and promotion
Nonspecialized career paths	Specialized career paths
Implicit control mechanisms	Explicit control mechanisms
Collective decision making	Individual decision making
Collective responsibility	Individual responsibility
Holistic concern	Segmented concern

Source: William C. Ouchi, *Theory Z: How America Can Meet the Japanese Challenge* (Reading, Mass.: Addison-Wesley Publishing Company, 1981), p. 58.

Ouchi also explains that the characteristics of Japanese management have derived from the culture—a culture woven interdependently because of collective rice farming and crowded conditions, causing it to be very ripe for industrialization. In contrast, the American culture has developed from the spirit of individualism of an expanding frontier. He acknowledges that the latter culture was not as conducive to industrialization.

Ouchi, like Pascale and Athos, points out that the Japanese style is not culture-bound, however, since many Japanese firms have with little adaptation transported their successful operations to the United States. Theory Z, then, becomes the modified model, including the best of the Japanese and American models. In a 1978 article,[5] Ouchi summarized this hybrid model as shown in Table 2.

Table 2

CHARACTERISTICS OF ORGANIZATIONAL TYPE Z
(Modified American)

Long-term employment
Consensual decision making
Individual responsibility
Slow evaluation and promotion
Implicit, informal control with explicit, formalized measures
Moderately specialized career path
Holistic concern, including family

Source: William C. Ouchi and Alfred M. Jaeger, "Type Z Organization: Stability in the Midst of Mobility," *Academy of Management Review* 3, no. 2 (1978):28.

Note the major differences between Type Z and the two models of Table 1. Theory Z emphasizes long but not lifetime employment; individual responsibility as opposed to the Japanese emphasis on collective responsibility; slow evaluation and promotion as in Japan; implicit control (Japanese) with explicit measures (American); moderately specialized career paths (a compromise); and holistic concern for employees as in Japan.

Like Ouchi, Drucker and Kobayashi[6] have recognized the values of consensus decision making to the organization, noting that it promotes not only better problem definition but improved acceptance and smoother implementation of selected actions.

The Manufacturing Management Theory

Robert H. Hayes conducted his research by visiting and studying several plants of six Japanese companies.[7] He finds the answer to Japanese superiority in excellent manufacturing management: clean facilities, responsible employees, little or no inventories on the plant floor, the absence of work stoppages, almost no rejected products, and "just-in-time" materials arrival. He discovered a remarkable absence of crisis management in the plants and excellent maintenance of equipment.

Hayes captures the essence of Japanese manufacturing management in the old Japanese saying—"pursuing the last grain of rice in the corner of the lunchbox." He points out that the Japanese are never satisfied with the quality of their products, even when the defect rate is at an unbelievable 1 percent. Nor are they satisfied as long as any defect exists in the manufacturing operation. Hayes also mentions, along with lifetime employment, the

likelihood of Japanese managers to focus on "everlasting customers," "supplier-partners," and "owners."

Hayes admits some technological advantages in Japan, but not superior technology per se. He believes the technological advantages stem from the fact that the Japanese insist on building their own process equipment in-house, which they in turn match with skilled employees trained in-house. They will not accept the compromise of a machine developed for several "users, and therefore several uses."[8]

Further support for the manufacturing management theory as an explanation for the achievements of Japanese companies is provided by Wheelwright, who states that Japan's impressive accomplishments in manufacturing stem chiefly from the effective integration of operations policy and manufacturing strategy.[9] As one example of this thesis, the author cites the common tendency in America of treating product quality and production planning as "swing factors" which can be traded off in order to meet the production output deadline. Thus, an American manager may deliver a product that, while functionally acceptable, is not up to the quality specifications. Or, sudden directive may be given to reduce inventory and/or worker levels in order to meet an end-of-period standard. The effect of such action is potentially to sacrifice achievement of the strategic goal of product quality for operating standard deadlines. In preserving the integrity of production system and strategic purpose, Banks and Wheelwright conclude:

> Experience has taught the Japanese the value of placing even short-term manufacturing decisions at the service of long-term strategy—a lesson that American companies have learned only imperfectly.[10]

In reporting their impressions after visiting the plants of three Japanese companies—Tokyo Sanyo Electric, Toshita Tsurumi Works, and Yokogaua Electric Works—General Electric manufacturing executives agreed that the critical differences between Japanese and American manufacturing were not really cultural and environmental, as had been expected, but rather were related to basic manufacturing policy and practice. Their comments are instructive:

> Nothing amazing was being done. We have known all along how to do these things, but we have lacked the discipline to follow through and do what we know how to do.
>
> It would be much easier for us if the differences we saw were technological or grand-strategy-related because they are things we could just go out and acquire. But they are not the most important differences.[11]

Wheelwright concludes that Japan's "truly impressive discipline and consistency in manufacturing operations" is the result of "a deliberate, thorough, and painstakingly developed way of thinking about the day-to-day management of production."[12]

The Quality Circle Theory

A common theme in the literature on the effectiveness of Japanese management is Japan's development and utilization of "quality control circles," or just quality circles" as they are now commonly called.[13] Although there are many variations of quality circles in practice, nearly all exhibit several common characteristics. Robert Cole provides a representative description of the structure and functioning of these organizations:

> A QC circle is a relatively autonomous unit composed of a small group of workers (ideally about ten), usually led by a foreman or senior worker and organized in each work unit. Participants are taught elementary techniques of problem solving including statistical methods. It is in principle a voluntary study group that concentrates on solving job-related quality problems. These problems are broadly conceived as improving methods of production as part of company-wide efforts. Some typical efforts include reducing defects, scrap, rework, and down-time. These activities in turn are expected to lead to cost reduction and increased productivity. At the same time, the circles focus on improving working conditions and the self-development of workers.[14]

In many respects, quality circles are rooted in the work of humanistic behavioral scientists such as Chris Argyris, Douglas McGregor, and Rensis Likert, who have long emphasized the significance of employee participation to effective management. Advocates of participative management cite many potential benefits to the firm, including better quality of decision making, improved communication among workers and managers, greater employee interest and enthusiasm in the jobs, stronger employee commitment to goal achievement, and generally improved human relations. Possible benefits to employees include greater job satisfaction through opportunities for achievement, recognition, responsibility, and personal growth.

In the United States, quality circles have been implemented in various forms by many large companies, including Lockheed, RCA, GE, GM, Martin-Marietta, Westinghouse, Hewlett-Packard, IBM, Tektronix, and AMF. Applications of the QC concept in the Mid-South region include Federal Express, Dover Corporation/Elevator Division, First Tennessee Bank, Holiday Inns, Hunter Fan, Baptist Hospital, Sharp Manufacturing, Baldwin Piano & Organ, Chromcraft Furniture, and Memphis Light, Gas and Water Division.[15]

Schooled in the behavioral techniques popularized in America, the Japanese borrowed and adapted these to their organizations. However, it appears that the Japanese have found their organizations more receptive to the implementation of this form of participation than have American managers. As Cole argues, the "Japanese managers believe in their labor force," and they have more fully accepted the fundamental premise of participative management—that employees are capable of contributing and desire to contribute to organizational goals.[16] Also, the organizational requirements of a supportive supervisory climate and the commitment of sufficient time for the participative process may be better satisfied in Japanese industry than in American industry.

Thus the quality circle theory ascribes the effectiveness of Japanese management to an in-depth application of the participation concept, which has apparently resulted in improved productivity through higher levels of motivation, greater sharing of decision making, stronger employee commitment, and intensive job satisfaction.

The Statistical Quality Control Theory

The fascination with Japanese management is today largely related to the consumer electronics and automobile industries. This is in sharp contrast to the conventional wisdom of the 1950s, when the label "made in Japan" signaled inferior merchandise.

In the fifties Japan focused on upgrading the quality level of its manufactured products. As with the development of quality circles, the expertise came largely from consultants in America, in particular Dr. W. Edwards Deming and J. M. Juran, who lectured widely on the development and utilization of statistics and quality control techniques. The Japanese quickly embraced the popular techniques developed in the United States, including Zero Defects and Value Engineering, and have become dedicated to the gospel of quality.[17] The Japanese appreciation for Dr. Deming's work is evidenced by his receipt of the Second Order Medal of the Sacred Treasure from Japan's Emperor Hirohito.

The attention to improved product quality appears to have had impressive results. With reference to the television industry, Juran notes:

> Between 1.5 to 1.8 defects per television set were discovered at the Motorola TV factory before Matsushita Electric took over in 1974. In 1978, under new management but virtually the same employees, the new Quasar brand had a defective rate of 0.03 to 0.04 per set. In the Japanese parent company, the defective rate at the factory averages 0.005 per set.
>
> Once on the market, Japanese televisions have from one-half to one-fourth the failure rates as compared to U.S. and European sets.[18]

From the literature one is struck by the commitment of Japanese manufacturers to inculcate knowledge of quality control techniques in workers and management, as well as engineers and specialists, through various training programs. The utilization of statistical methods, including pareto charts, cause and effect diagrams, check sheets, stratification, scatter diagrams, and Shewart control charts, is becoming common as a result of the quality control revolution.[19]

Of course, productivity is closely related to quality, and in Japan there is a fervent interest in "doing it right the first time." According to Deming, quality cannot be increased by inspection, and using men and machines to separate good product from bad is not the answer. The quality capability must be built into the production process. In comparing Japanese and American management, Deming argues that Americans learned the techniques too, but the Japanese took them seriously.[20]

The Long-Term, Bottom Line Theory

Peter Drucker suggests that the real reason for Japanese superiority springs from a focus on long-term objectives.[21] Large U.S institutional investors, such as the pension funds, he laments, tend to reject firms that do not show strong performance in such short-term measures as quarterly earnings per share. Thus, high technology companies are reluctant to "plow back money long term" for fear of adverse effects on their price/earnings ratios. The market, Drucker believes, is far too sensitive to short-term fluctuations.[22]

A similar theme is echoed by William Anderson, chairman and chief executive officer of National Cash Register Corporation. He cautions that American managers must look "beyond this month's sales report and this year's financial performance" and begin to evaluate both employee and organizational achievements from a long-term perspective.[23] The clear implication is that U.S. management, long accustomed to focusing on near-term results in measuring executive performance, should adopt criteria that do not sacrifice tomorrow for today—that look five years ahead, not just a month ahead.

Further evidence of the long planning horizon of Japanese management is the tradition of lifetime employment, resulting in a worker spending his entire career with one firm. Besides providing essentially a guaranteed job to the worker, the longevity of employment encourages extensive investment in employee training and development and promotes employee loyalty and *esprit de corps*, as evidenced by the company songs and exercise programs in many of the large plants. The nearly complete job security also reduces costs of turnover and subsequent recruitment. But, perhaps most important, the worker's assurance of economic security greatly reduces his resistance to technological change, which enables methods changes to be implemented more easily. Drucker maintains that this willingness to accept change and to embrace opportunities for productivity gains might be "the most important secret of the Japanese economy."[24] In sharp contrast, the typical American worker in a unionized firm has been conditioned to resist change, fearing both real and imagined threats to his economic security.

Conclusion

This article has described the major theories that have been advanced to explain Japanese managerial success. Researchers have attributed Japan's managerial achievements to factors as exotic as a unique style of administration and as mundane as mastery of fundamental manufacturing principles.

It appears that, as in the "Parable of the Spindle," each writer has found the major reason for Japanese success embedded within his own specialty. This is not necessarily because of biased analyses, however. Rather, it may be because the researchers are unable to fully grasp the intricate data necessary to adequately describe the industrial success of an entire nation. Thus, they are reacting not like the specialists in the "Parable of the Spindle," but instead like the blind men describing an elephant. In the Indian fable, one blind man felt the knee of the elephant and described the elephant as a tree-like creature; another felt the tusk and likened the elephant to a spear; and a third felt the tail and insisted the elephant was small and round like a rope.

Perhaps all of the theorists are correct in attributing Japanese excellence to the aspect of Japan's industry that they have examined. The Japanese, in their obsession to redeem the honor of their country after World War II and

in their quest for world respect in industry, have produced excellence in many areas of the process of management. Thus, it may be that the success of Japan's management is much too complex an issue for any single research effort to capture and explain, given the limitations of the researcher's perspective. If so, future research efforts may be more profitably directed not toward seeking *the* reason accounting for Japanese excellence, but toward determining which of the theories can be successfully adapted and implemented in American enterprises. Perhaps the real secret of Japanese management success—Japan's "spindle"—is simply the motivation to achieve excellence in quality and productivity, a phenomenon so evident in Japanese manufacturing and service industries. A similar motivation was once the hallmark of American management. Ironically, it was the American example that helped instill in the Japanese the value of "pursuing the last grain of rice in the corner of the lunchbox."

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[1]Elias H. Porter, "The Parable of the Spindle," *Harvard Business Review*, May-June 1962, pp. 58-66.

[2]Richard Tanner Pascale and Anthony G. Athos, *The Art of Japanese Management* (New York: Simon and Schuster, 1981).

[3]Ibid., p. 204.

[4]William C. Ouchi, *Theory Z: How American Business Can Meet the Japanese Challenge* (Reading, Mass.: Addison-Wesley Publishing Company, 1981).

[5]William C. Ouchi and Alfred M. Jaeger, "Type Z Organization: Stability in the Midst of Mobility," *Academy of Management Review* 3, no. 2 (1978):305-14.

[6]Peter R. Drucker, "What We Can Learn from Japanese Management," *Harvard Business Review*, March-April 1971, pp. 110-22; and S. Kobayashi, "The Creative Organization—A Japanese Experiment," *Personnel* 47, no. 6 (November-December 1970):8-17.

[7]Robert H. Hayes, "Why Japanese Factories Work," *Harvard Business Review*, July-August 1981, pp. 57-66.

[8]Ibid.

[9]Steven C. Wheelwright, "Japan—Where Operations Really Are Strategic," *Harvard Business Review*, July-August 1981, pp. 67-74.

[10]Robert L. Banks and Steven C. Wheelright, "Operations vs. Strategy: Trading Tomorrow for Today," *Harvard Business Review*, May-June 1979, p. 112.

[11]Wheelwright, p. 68.

[12]Ibid.

[13]Robert E. Cole, "Learning from the Japanese: Prospects and Pitfalls," *Management Review*, September 1980, pp. 22-28 and 38-42; Robert R. Rehder, "What American and Japanese Managers Are Learning from Each Other," *Business Horizons* 24, no. 2 (1981):63-70; Hirotaka Takeuchi, "Productivity: Learning from the Japanese," *California Management Review* 23, no. 4 (1981):5-18; and Ed Yager, "Quality Circle: A Tool for the 80's," *Training and Development Journal*, August 1980, pp. 60-62.

[14]Cole, p. 24.

[15]"Quality-Circle Concept for Boosting Productivity Is Being Revived in Area," *The Commercial Appeal*, Jan. 17, 1982, p. B4.

[16]Cole, p. 25.

[17]Takeuchi.

[18]J. M. Juran, "Japanese and Western Quality: A Contrast in Methods and Results," *Management Review*, November 1978, p. 42.

[19]"Japan: Quality Control and Innovation," *Business Week*, July 20, 1981, p. 23.

[20]W. Edwards Deming, "What Can American Manufacturers Learn from the Japanese?" *Iron Age*, Oct. 6, 1980, p. 51.

[21]James Flanigan, "The Wrong Bottom Line," *Forbes*, May 25, 1981, p. 46.

[22]Ibid., p. 42.

[23]William S. Anderson, "Meeting the Japanese Economic Challenge," *Business Horizons*, March-April 1981, p. 59.

[24]Drucker, p. 116.

(Continued from page 9)

Results

Once the questionnaires were returned, the data were analyzed by dividing the respondents into three mail categories. The first category was based on annual postage expenditures of the respondent; the second category was based on industry type of the respondent; and the third category was based on industry type in each annual postage expenditure category.

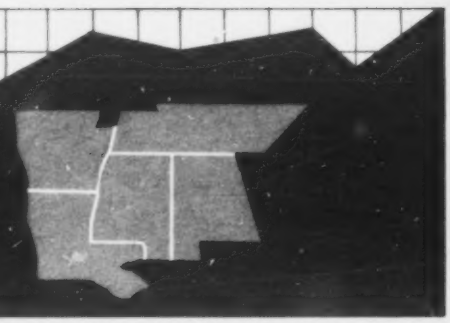
The analysis indicated the advertising had reached a majority of all mailers in each category of annual postage expenditure. Publications and television commercials were the most successful means used to reach prospective customers. A majority of the respondents in each mailer category indicated they intend to utilize the nine-digit Zip Code and will begin using the new Zip Code within a year after it is offered by the Postal Service. The data also indicated the advertising did not present the benefits offered for using the new system. The results did not indicate a significant difference in any category as to who will most likely utilize the nine-digit Zip Code once it is offered by the Postal Service.

The analysis by industry type also indicated the advertising had reached a majority of the mailers in each category. The most successful means used to advertise the nine-digit Zip Code were, again, publications and television. In each category, a majority of the mailers indicated they will use the nine-digit Zip Code, but only a few knew of the benefits offered for using the new Zip Code. Overall, the results did not indicate any significant difference in the responses by industry type.

Because of the small number of responses from medium mailers and major mailers classified according to industry type, the sample was not large enough to draw any conclusions for this category.

The overall results of the study indicated the Postal Service has been successful in reaching a majority of the business customers through the use of television commercials and publications. A majority of the respondents did indicate their intentions of using the nine-digit Zip Code, but in a number of cases respondents felt they had little or no choice. The findings also indicated that little information has been given to the consumers on the benefits offered for using the new nine-digit Zip Code. There was no significant difference in any category as to who will most likely utilize the nine-digit Zip Code once it is offered by the Postal Service.

MID-SOUTH ECONOMY



BUREAU OF BUSINESS & ECONOMIC RESEARCH THE FOGELMAN COLLEGE OF BUSINESS AND ECONOMICS MEMPHIS STATE UNIVERSITY

STATISTICAL SUPPLEMENT

Recessions usually end when the economy is at its lowest point. As the U.S. and Mid-South economy entered the second quarter of 1982, economic observers increasingly expected the current recession to bottom out. Inflation was showing signs of winding down, with the April 1982 increase over April 1981 of 6.6 percent. The Consumer Confidence Index registered its second straight month of advance in May. Housing starts for May 1982 advanced 22.3 percent from April, causing starts to rise above the one million annual rate mark for the first time since July 1981. The prime rate, while at a lofty 16.5 percent, declined 400 basis points from its record high of 20.5 percent last August.

Setting the stage for the beginnings of an economic upturn was the initiation of the widely expected correction in inventories (although the Purchasing Managers Index was down substantially and May's performance for new orders and production was reported to be the worst since December 1981). Also suggestive of an economic upturn were the last-ditch compromise on the fiscal 1983 budget working its way through Congress and the anticipated stimulus of the July tax cut. The general consensus at this point is that the recovery will depend on consumer spending and the future behavior of interest rates.

For the five-state Mid-South region the growth in personal income for the first two months of 1982 versus 1981 was weak, up only 4.2 percent compared to the national increase of 7.8 percent. Sales tax collections were slow for the first four months of 1982, although in real terms collections have increased, since prices have advanced only 1.0 percent over the same period. The aggregate unemployment rate stands at 10.7 percent for April 1982, down from 11.9 percent in January but still 3.1 percent higher than last April. And, finally, a recent report by the Commerce Clearing House listed the per capita state and local tax burden for fiscal 1979-80 for the Mid-South states as: Tennessee $656, Arkansas $654, Mississippi $646, Louisiana $841, and Alabama $650. The U.S. average was $987.

Labor

The Mid-South civilian labor force totaled 7,706,300 in April 1982, up 4.4 percent from a year ago. The total number of persons unemployed for April 1982 jumped 47.3 percent from last April to total 824,900. Mid-South manufacturing employment totaled 1,442,600, down 6.4 percent from April 1981, while non-manufacturing jobs gained 24,400 from a year ago, up only 0.5 percent. The pace of increase in manufacturing wages has slowed, as has the increase in average weekly hours worked. Louisiana was the only Mid-South state to outpace the nation in production wage increases. This wage deceleration is also evident by the fact that total private weekly earnings in the nation were up only 4.1 percent from last April, while the hourly rate increased at a 5.9 percent pace.

The current employment profile for the U.S. economy highlights the changing composition of the work force and can generally be applied to the Mid-South economy. Listed in descending order, the March 1982 over March 1981 changes show construction down 6.7 percent, manufacturing off 4.0 percent, government declining 1.9 percent, transportation slipping 0.9 percent, trade up 1.3 percent, finance, insurance and real estate rising 1.5 percent, and services jumping 2.9 percent. For the Mid-South region, the industries with the largest net job losses for the April 1982 versus April 1981 period were textiles and apparel, paper and wood products, electrical and transportation equipment, construction, and government.

Construction

The dollar value of construction activity for the Mid-South region continues to wane. Tennessee was the only Mid-South state in April 1982 to register an increase in total construction from a year earlier, up 3.1 percent. This was primarily due to a 53.6 percent jump in public works and utilities. Louisiana was the only Mid-South state to post a gain in residential construction activity, up 22.1 percent for a total of $165.4 million, although 20.0 percent fewer dwelling units were started to date as compared to last year. Recently announced figures for May 1982 indicated a turnaround may be occurring, with residential starts posting a 22.3 percent gain over April. In addition, the dollar value of March construction contracts awarded for residential building and public works and utilities registered positive gains of 11.2 percent and 8.4 percent, respectively.

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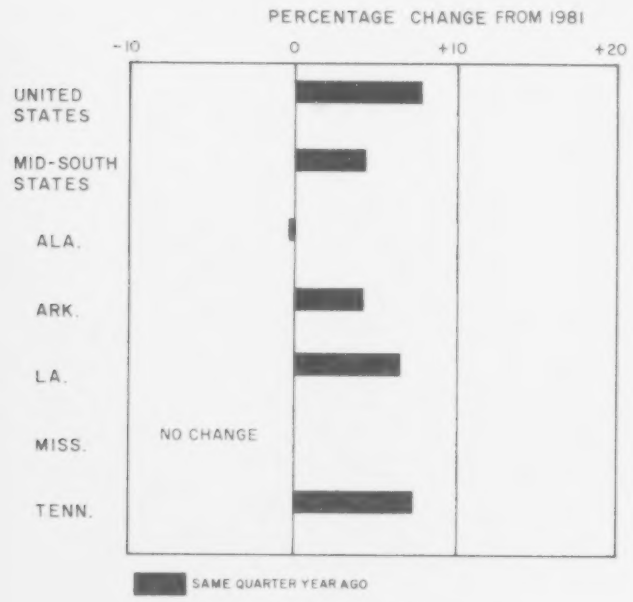
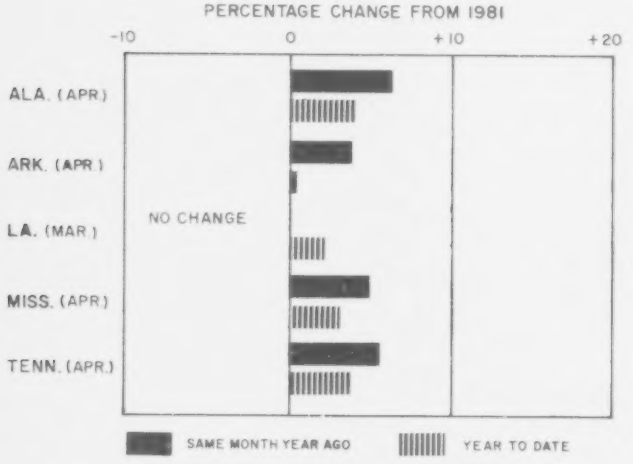
PERSONAL INCOME - JAN.-FEB., 1982

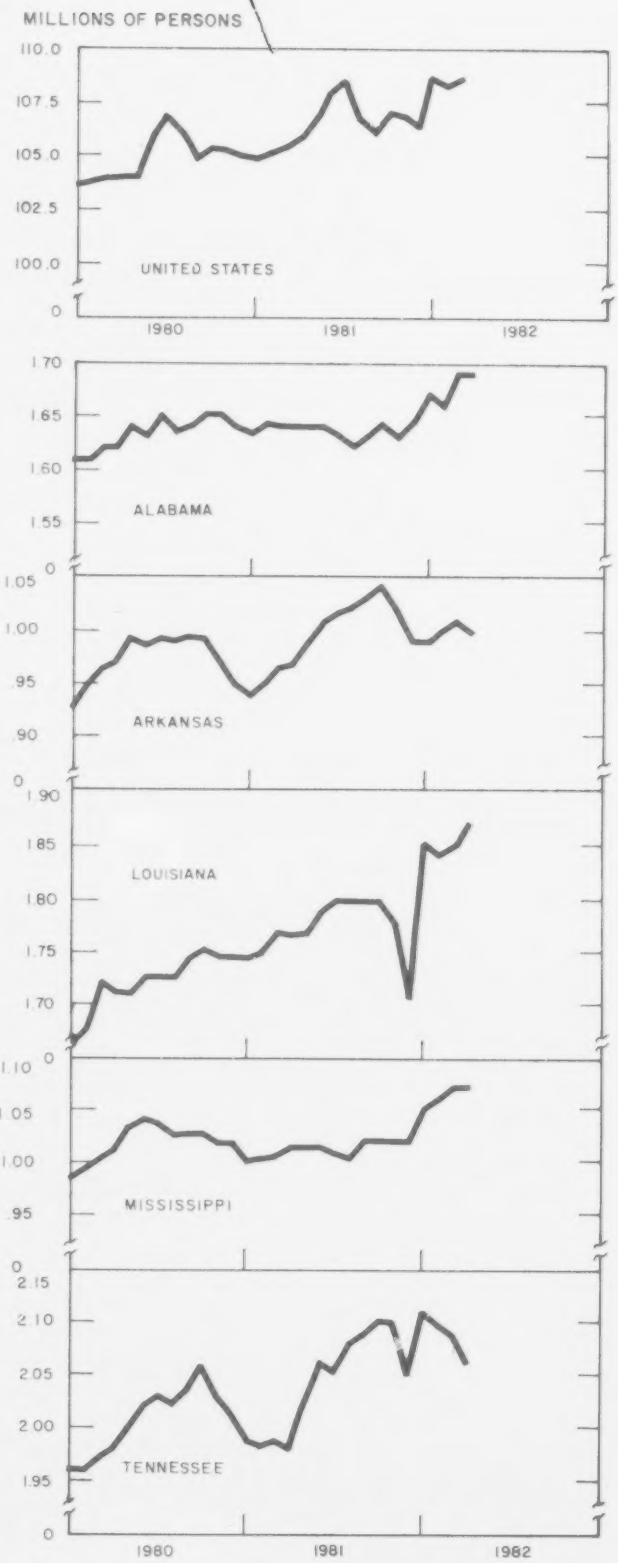


SOURCE: BUSINESS WEEK, JUNE 14, 1981

SALES TAX COLLECTIONS 1982



CIVILIAN LABOR FORCE



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Finance

Mortgage loan activity in the Mid-South region remains substantially below last year's level across the board. Total loans made for April 1982 were down 42.2 percent from a year ago. However, total deposits at Mid-South savings and loans were up moderately, primarily due to the growth in NOW accounts. The flow of net savings showed signs of improvement from the level of a year ago, although most Mid-South states are still experiencing negative savings flow positions.

Savings deposits at Mid-South and U.S. commercial banks also continue to register declines, but time deposits are still growing at double-digit percentage rates. Demand

LABOR 1982	United States (March)	Mid-South States: Alabama (April)	Arkansas (April)	Louisiana (April)	Mississippi (April)	Tennessee (April)
Civilian Labor Force	108,761,000	1,692,400	1,006,300	1,875,300	1,071,300	2,061,000
Percent Change Year Ago	+ 1.0	+ 1.9	- 2.7	+ 2.0	+ 2.3	+ 3.7
Unemployed	10,290,000	220,200	96,100	184,700	102,900	221,000
Percent Change Year Ago	+24.4	+29.1	+ 3.0	+20.2	+25.8	+49.3
Unemployment Rate						
1982	9.5	13.0	9.5	9.9	9.6	10.7
1981	7.7	10.3	9.0	8.4	7.8	7.4
Non-Agricultural Wage & Salary Employees	90,255,000	1,337,500	726,000	1,628,300	808,600	1,720,800
Percent Change Year Ago	- 0.5	- 0.7	- 2.7	+ 0.9	- 1.9	- 1.7
Manufacturing Employment	19,375,000*	346,800	198,300	205,200	210,100	482,200
Percent Change Year Ago	- 4.0	- 4.5	- 5.7	- 5.9	- 4.8	- 4.9
Non-Manufacturing Employment	71,447,000*	990,700	527,700	1,423,100	598,500	1,238,600
Percent Change Year Ago	+ 0.4	+ 0.8	- 1.5	+ 2.0	- 0.8	- 0.5
Average Weekly Earnings of Production Workers in Manufacturing	$327.27	$290.38	$253.99	$375.86	$246.27	$272.70
Percent Change Year Ago	+ 5.2	+ 4.7	+ 5.2	+ 6.7	+ 4.7	+ 3.0
Average Weekly Hours of Production Workers in Manufacturing	39.1	39.4	38.6	39.9	38.6	38.3
Percent Change Year Ago	- 2.0	- 1.0	- 1.5	- 3.4	- 2.0	- 3.5
Average Hourly Earnings of Production Workers in Manufacturing	$8.37	$7.37	$6.58	$9.42	$6.38	$7.12
Percent Change Year Ago	+ 7.3	+ 5.7	+ 6.8	+10.4	+ 6.8	+ 6.7

*Seasonally adjusted.

Source: Departments of Employment Security and Survey of Current Business.

CONSTRUCTION 1982	United States (March)	Mid-South Region 6[a] (April)	Alabama[b] (Feb.)	Arkansas (April)	Louisiana (April)	Mississippi (April)	Tennessee (April)	West Tennessee (April)
Value of Construction Contracts Awarded								
Total Construction								
Percent Change Year Ago	- 6.8	-23.1	NA	-36.1	- 9.4	-23.4	+ 3.1	-51.1
Percent Change Year-to-Date	- 8.8	-17.6	NA	-26.5	- 2.1	-29.2	-23.3	-44.7
Total Building								
Percent Change Year Ago	- 5.6	-21.4	-23.0	-25.0	- 9.2	-20.8	-10.1	-49.2
Percent Change Year-to-Date	- 6.5	-16.4	NA	-21.6	+10.0	-22.3	-14.9	-42.8
Residential Building								
Percent Change Year Ago	-21.6	- 2.5	-33.4	-21.8	+22.1	-22.8	-17.5	-32.9
Percent Change Year-to-Date	-23.4	-17.7	NA	-29.4	- 1.2	-28.4	-18.4	-46.8
Non-Residential Building								
Percent Change Year Ago	+11.2	-41.4	-14.6	-32.2	-38.2	-14.6	0.0	-67.5
Percent Change Year-to-Date	+11.6	-15.0	NA	- 7.2	-21.2	- 5.2	-11.9	-38.9
Public Works and Utilities								
Percent Change Year Ago	+ 8.4	-29.5	NA	-51.5	-30.0	-23.5	+33.6	-73.5
Percent Change Year-to-Date	+11.5	-21.3	NA	-40.0	-37.6	-38.4	-31.8	-58.8
Total Dwelling Unit Starts to Date	947,000[c]	17,696	NA	3,315	7,212	3,456	5,827	932
Percent Change Year Ago	-26.5	-30.7	NA	-29.0	-20.0	-28.0	-19.9	-48.5

[a]Region 6 includes Arkansas, South Illinois, Louisiana, Mississippi, East Missouri, and West Tennessee.

[b]Twelve-month cumulative rate.

[c]Seasonally adjusted annual rate.

Source: F. W. Dodge Reports, Federal Reserve Bulletin, and the Federal Reserve Bank of Atlanta.

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deposits increased by 5.1 percent in the Mid-South, an improvement over the near zero growth experienced in February. Finally, the April 20, 1982, issue of the *American Banker* listed the First Tennessee Bank of Memphis as the largest bank holding company in the Mid-South region.

SAVINGS AND LOAN ACTIVITY April 1982	Alabama	Arkansas	Louisiana	Mississippi	Tennessee[1]
Mortgage Loans Made (millions)	$20.2	$ 19.4	$57.2	$ 7.7	$21.6
Percent Change Year Ago	-47.8	- 42.1	-30.8	-69.1	-53.1
Percent Change Year-to-Date	-47.3	- 12.9	-23.5	-62.1	-39.7
Net Savings Flow (millions)[2]	($10.3)	($ 11.0)	($16.0)	$ 2.5	($32.7)
Percent Change Year Ago	+55.4	+146.0	+27.9	+85.3	-65.5
Percent Change Year-to-Date	+ 5.6	+ 92.0	+57.5	+21.1	+39.3

[1]Figures are for total loans made.

[2]Net savings flow equals new savings received plus dividends credited minus savings withdrawn.

Source: Federal Home Loan Banks of Little Rock, Cincinnati, and Atlanta.

FINANCE April 1982	United States	Mid-South States	Alabama	Arkansas	Louisiana	Mississippi	Tennessee
Member Banks as of 4/7/82 Percent Change from Comparable Date 1981							
Total Deposits	+12.4	+12.9	+13.1	+ 9.2	+14.8	+13.0	+11.8
Deaand Deposits	+ 1.3	+ 5.1	+ 6.4	- 7.5	+ 6.3	+ 4.4	+ 6.2
Time Deposits	+20.3	+17.9	+19.6	+15.2	+20.4	+16.9	+15.8
Savings Deposits	- 4.6	- 4.9	- 5.0	- 1.9	- 0.6	- 9.4	- 8.7

Source: The Federal Reserve Bank of St. Louis and the Federal Reserve Bank of Atlanta.

THE TENNESSEE ECONOMY

Tennessee's civilian labor force grew 3.7 percent since last April, to total 2,061,000 in April 1982. The total number of persons unemployed was 221,000, a jump of 49.3 percent from a year ago, putting the unemployment rate at 10.7 percent. This is a drop from the 12.1 percent registered in January, or some 35,000 fewer people unemployed. Personal income for the first two months of 1982 compared to 1981 posted a gain of 7.2 percent, slightly below the national average but the best in the Mid-South region. Sales tax collections totaled $93.3 million in April, up a modest 5.5 percent over last April.

The Tennessee Farm Price Index (1977 = 100) stood at 129 in April 1982, down seven index points from a year ago. March 1982 indications for the winter wheat crop showed a 3.5 percent increase in acres harvested, but a 9.1 percent drop in bushels yielded per acre, compared to the March 1981 figures. The first quarter live weight slaughter of cattle was up 0.7 percent, while hogs were down 3.4 percent compared to the first quarter of 1981.

The dollar value of construction contracts awarded totaled $199.4 million in April 1982, up 3.1 percent from a year ago. This was the largest gain in the Mid-South region and was primarily due to a 53.6 percent boost in public works and utilities. Residential construction activity remained in the doldrums, with 19.9 percent fewer dwelling units started to date than a year ago. To aid the industry, the Tennessee Housing Development Agency announced plans to sell $150 million in housing revenue bonds in early July, which is estimated to create about 3,000 construction jobs. This is expected to finance about 4,000 home loans averaging $35,000.

Total commercial bank deposits increased 11.8 percent from a year ago, while time deposits rose 15.8 percent. Both were below the national average. Savings deposits at banks declined 6.7 percent compared to a 4.6 percent decline in the nation. Total deposits at Tennessee's savings and loans institutions rose 4.1 percent in April, primarily due to a doubling in NOW account deposits.

The latest report by the Bureau of Census, *1980 County Business Patterns*, showed which sectors of the industrial economy, by SIC Code, registered positive growth in number of firms over 1979 figures. Sectors showing positive growth were agricultural services, oil and gas extraction, textile products, fabricated metal products, transportation services, apparel and accessory stores, business services, health services, and legal services.

Finally, the Organization of African Unity, representing about 50 African countries, announced plans to establish an international trade center in Memphis, and a Canadian firm is expected to build an electronics products assembly plant in Morristown.

BEST AVAILABLE COPY

THE CAUSES, THEORY, AND CONTROL OF ABSENTEEISM

*Bevars D. Mabry**

Although definitions vary, *absenteeism* refers to a personnel problem in industry that occurs when employees excessively fail to appear or to remain on their jobs at their regularly scheduled times. An employee is said to be *absent*, or not at work, if he or she is not present at the time and place to which the employer has normally assigned the worker to perform his or her tasks. Whereas an absence is a failure to appear at work, absenteeism refers to a frequently repeated pattern of absences on the part of the worker.

Absences deprive employers of needed manpower and result in interruptions in production and corresponding losses in output. Product quality may suffer, scrap may be increased, and if a strategic employee is absent, the efficiency of an integrated work group may substantially be reduced.

Employers who do not keep accurate records of absences are often unaware of the cost implications. The largest source of direct costs is the leave pay benefits (sick and personal leave) distributed to absent workers. Adjusting for inflation, in the United States the 1973 estimate was $20 billion from this source.[1] Losses in the economy in 1981 were about $45 billion. Added to direct costs are such expenses as (1) overtime pay to workers replacing absentees, (2) the wages paid to the excess number of employees required to assure the necessary manpower, and (3) the training and break-in cost of replacement workers shifted from other tasks to those of the absent employees.[2] Indirect costs are also significant and include wages paid to personnel required to maintain records. In 1974 the average cost of absence per worker was $134 in manufacturing and $146 for all industry, or in 1981 dollars, $253 and $276, respectively.[3]

Measurement

Although absences have been measured in numerous ways, the most widely used measures of absence rates are those reported by the Bureau of Labor Statistics. Three types of rates are reported:

1. The *incidence rate* measures the number of workers absent, regardless of duration, per 100 of those employed during the specified period.
2. The *inactivity rate* measures the time lost as a percentage of total time available to be worked.
3. The *severity rate* measures the time lost by absent workers as a proportion of the total amount of time they normally would have worked had they not been absent.[4]

Seventy-five percent of the firms surveyed by the Bureau of National Affairs used the inactivity rate to measure absences.[5] This rate is perhaps the most easily convertible into estimates of the costs of absences. Inactivity rates tend to be higher in goods-producing industries (3.9 percent) than in service-producing industries (3.2 percent); they are higher for females (4.3 percent) than for males (3.0 percent); and they are higher for union workers (3.0 percent) than for nonunion workers (1.8 percent). Inactivity rates tend to decline with age up to 45 years.[6]

Table 1

ABSENCE RATES FOR FULL-TIME NONFARM WAGE AND SALARY WORKERS
1973-1979

Type of Rate	1973	1974	1975	1976	1977	1978	1979
Incidence rate	6.5	6.2	6.1	6.4	6.5	6.6	6.7
Inactivity rate	3.5	3.3	3.4	3.5	3.5	3.5	3.4
Severity rate	55	56	58	56	56	55	n.a.

Source: Daniel E. Taylor, "Absent Workers and Lost Work Hours, May 1978," *Monthly Labor Review* 102, no. 8 (August 1979), p. 50.

Not until 1967 were absence rates continuously collected and reported. Since 1968, the absentee rates in the United States have remained relatively stable, and these are lower than in other industrial countries. Sweden has reported a doubling of absenteeism in recent years, which has been attributed to national health policies permitting paid sick leave.[7] Inactivity rates in Australia and in South Africa measure about 4.0 percent, compared to 3.5 percent in the United States. On the other hand, comparable rates in West Germany are 11.0 percent; in the Netherlands, 10.0 percent; and in Italy, 15.0 percent.[8]

Causes

An absence normally follows from a personal decision by a worker not to report to work at a regularly scheduled time. The decision itself is a product of the interaction of three sets of conditions: (1) those pertaining to the *personal* characteristics of the worker; (2) those *internal* to the firm; and (3) those emanating from the environment *external* to the establishment.

Personal characteristics pertain to age, sex, education, income, and occupation. Firms that employ proportionately more teenagers, females, or older workers can expect to have higher absence rates. Teenage workers tend to have

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higher incidence and inactivity rates, reflecting a lower commitment to ongoing employment and a concentration of teenagers in lower level, less challenging jobs. Older workers, particularly those over age 55, also have higher inactivity rates, reflecting an increasing susceptibility to illness with age. Females, both married and unmarried, have higher incidence and inactivity rates than males, whether married or unmarried, and married females have higher rates than unmarried women. Women seem to be more susceptible to illness and injury than men, and family responsibilities conflicting with work tend to increase the inactivity rate of married over the unmarried females. If females and aged males are more prone to fatigue, this lowered physical condition can also make them more susceptible to work-related injuries. Alcoholism and mental problems are characteristics of many workers identified as being chronic absentees. Alcoholic workers are absent 2.5 times more than nonalcoholics, with the most frequent occurrences being on Monday and Friday.[9] Absentee rates also tend to vary inversely with levels of education and income, both of which are positively correlated with occupational levels.[10] Worker characteristics can be used to identify those who may be absence-prone, since 90.0 percent of absences are caused by 10.0 percent of the work force.[11]

Table 2

INCIDENCE AND INACTIVITY ABSENCE RATES BY INDUSTRY AND UNION STATUS
May 1978

Industry	Incidence Rate		Inactivity Rate	
	Union	Nonunion	Union	Nonunion
Total	7.6	6.1	4.3	3.2
Manufacturing	8.5	6.6	4.9	3.6
Transportation and Utilities	7.8	5.7	5.4	3.8
Trade	6.7	5.3	3.3	2.6
Services	7.3	7.0	3.5	3.3
Public Adminstration	7.9	5.9	3.8	2.8

Source: Daniel E. Taylor, "Absent Workers and Lost Work Hours, May 1978," *Monthly Labor Review* 102, no. 8 (August 1979), p. 52.

Conditions internal to the firm also affect absentee rates. Concern with high absenteeism during World War II in American industry led Elton Mayo and his associates to study factors inside an organization that could contribute to absenteeism. The reasoning proceeded as follows: If workers are dissatisfied or alienated from their jobs or if working conditions are unpleasant, or if workers do not identify with their work tasks and work associates, then work itself will be distasteful. Workers, therefore, will find reasons not to attend their jobs. The highest incidence of absences was found to be among new workers who had not yet developed close relationships with job and fellow employees.[12] The critical element in maintaining stable working conditions and close working relationships was seen to be the quality of supervision that organized the work tasks and fielded the problems that workers communicated.[13] More recent studies have confirmed that employees' perceptions of fairness—in terms of pay levels, pay rules, rule administration, and supervisory fairness—are strong predictors of absenteeism.[14]

Absence rates have tended to be lower in smaller firms than in larger ones.[15] This may be attributed to a higher degree of moral involvement of the worker in the smaller firm with the organization and work tasks. This moral involvement may be sufficient to motivate attendance. Another reason for lower absence rates in smaller firms may be because workers by skill level both earn more in smaller firms and enjoy greater task satisfaction. They are therefore uniformly more satisfied in their jobs.[16]

Because blue-collar workers have more mental health problems that reduce their ability to cope with work-related stress and anxiety, firms whose labor force is predominantly blue-collar will have higher rates.[17] Similarly, firms which have long workweeks and which impose long hours of overtime will tend to experience a rise in the absence rate as workers take time off to attend to personal business and to recover from the effects of fatigue.[18] Interestingly, the opposite does not appear to hold; that is, firms with shorter hours of work or with four-day workweeks have not experienced a long-run decline in absenteeism.[19] Studies indicate that firms with more liberal sick leave benefits also tend to have more absences.[20] As sick leave benefits are expanded, the absence rate may be expected to rise.

Factors external to the firm also influence absence rates. Epidemics can increase the general incidence of illness and, hence, affect the absentee rate, particularly if epidemics are local or regional. Similarly, unusual weather conditions can impair travel or lead to increases in the illness rate. For example, companies in the Northeastern and North Central states have higher absence rates in the winter than those in the West and South.[21] (Absences due to weather, however, are excluded from rates computed by the Labor Department.) Transportation systems can be disrupted because of strikes, equipment failures, or gasoline shortages and create logistic problems for commuting workers. Demographic movements can alter the composition of the nation's labor force, putting those with higher incidence and activity rates, such as young persons and females, into the labor pool. Absentee rates may tend to vary with the business cycle, rising during economic recovery and falling during recession, although recent evidence disputes this.[22] Finally, it has sometimes been alleged that a weakening of social attitudes—mores—toward the work ethic has weakened the will and sense of obligation to attend work diligently and consistently.[23] Because many of these factors external to the firm are random, one can expect variations to occur in periodic measures of absence rates among firms that are disproportionately subjected to these influences.

Theory

The economic theory of absences is a subset of the theory of the individual's allocation of time between work and leisure,[24] which forms the basis for the theory of individual labor supply. The theory assumes that the

individual worker seeks to maximize a utility function in which income derived from time at work and leisure are necessary substitutes.

A theory of absence behavior assumes a specified work constraint in terms of the length of the workday. The time to be allocated by the worker is that available in a one-day period. Given his or her unique utility function for that day, the individual must choose whether or not to go to work. The worker maximizes his or her utility by going to work for the specified work period if in terms of time the marginal utility of the day's earnings exceeds the marginal utility of leisure.

An analogous but simpler formulation of the decision process is in terms of the costs, psychic and economic, of going to work (C_w) or not going to work (C_a). These costs can be expressed functionally as follows and are described below:

$$C_w = g(D, T, K, S)$$
$$C_a = f(F, W, M, E)$$

Costs of Going to Work (C_w)

D: The costs of going to work depend upon the magnitude of the disutility of work (*D*). Adverse working conditions, abusive or incompetent supervision, job monotony, and degree of work group alienation all can contribute to dissatisfaction with the job and raise *D*.

T: The worker incurs transport and go-to-work costs (*T*). As gasoline prices increase, gas lines lengthen, and pubic transit systems decay, *T* costs rise.

K: When one is at work, one is foregoing utility from alternative activities. Hence, there are opportunity costs of working (*K*). If special events occur during working hours, such as the telecast of the World Series or the Olympics, or if one's spouse has a day off, or if a close dependent relative is ill, or on days before and after weekends or holidays, or as overtime increases, then *K* costs tend to be higher.

S: Another cost of working consists of the energy expenditure required by the job (*S*). Stamina-reducing illnesses, arduous work tasks, or overtime that produces fatigue can raise the *S* costs of working.

Costs of Not Going to Work (C_a)

F: When one is absent from work, one inconveniences the members of one's work group and incurs their disapproval. A psychic loss is also experienced during an absence if the work group is particularly close and provides identity and ego gratification to the worker.

W: A direct monetary cost of being absent is the income lost for missing work. Not only may there be a loss of wages, but overtime and holiday pay opportunities may be foregone. Paid sick leave, however, lowers *W*.

M: An absent worker may incur managerial disapproval (*M*). This disapproval is an increasing function of the frequency and extent of absences, and can be expressed through disciplinary action, impaired eligibility for bonuses, and increased risk of layoff. Union protection can reduce *M*, however.

E: If a work ethic (*E*) exists, then engaging in work carries with it a sense of moral responsibilities. Hence, as this ethic in the worker is strong or weak, *E* is raised or lowered.

The Decision Rule

If in the worker's implicit cost calculations C_w exceeds C_a, then the worker will choose to be absent. On the other hand, as C_a exceeds C_w, the employee will attend his or her job. As environmental conditions vary so as to increase the costs components of C_w or to lower those of C_a, correspondingly absences will tend to increase. Hence, the causes of absences described above can be interpreted in terms of the application of this simple principle. Similarly, both trends in the absence rate and policies to control absences can be analyzed on the basis of this principle.

Control

The costs of absences and the disruptions in scheduling have led managements to institute policies designed to reduce their frequency and incidence.[25] The object of control policies is to reduce the severity of the absence problem, i.e., to modify organizational attendance behavior. Control policies operate by altering the costs estimated by employees of either going to work or of being absent and, in so doing, enable the workers to make rational cost-minimization decisions. To achieve company objectives, the information provided by policy instruments must provide signals to employees that cause them to lower their estimate of the costs of going to work and to increase their costs of being absent.[26]

Policies to reduce the costs associated with work have assumed a number of forms. In order to reduce the disutility of work, enrichment programs have been introduced by some firms.[27] Job boredom has been relieved through job rotation, through better screening, testing, and placement of applicants, through expansion or rearrangement of tasks in order to enrich the job, or through such improvements in the work environment as piped-in music, fresh paint to brighten the work site, or rearrangement of work stations to promote social intercourse. Supervisors have been given special training to counsel and help workers with their work problems.[28] To reduce the costs of travel to and from work, firms have promoted and coordinated carpools. Telephone companies have purchased vans to transport workers at company expense to work sites, and other companies have moved facilities to the suburbs, closer to the workers' residential sites.

In order to decrease the opportunity costs of working and to permit workers more freedom to schedule personal activities, firms have experimented with flexible work schedules. First initiated in Germany, where absence rates are sometimes twice those in the United States, flexible work schedules met with immediate success in that short-term absences were reduced by 50.0 percent and tardiness was almost completely eliminated.[29]

Adoption of flexitime in the United States has been impaired by the Fair Labor Standards Act, which limits

carryover of hours from either one day to another or one week to another. Nevertheless, by 1977 several hundred thousand workers were participants in such programs.[50] The objectives were largely achieved. In particular, 71.0 percent of firms responding to a 1974 survey reported reduction in absenteeism, and all reported a reduction in tardiness. Both absenteeism and tardiness had been affected by traffic tie-ups, and the lessening of traffic congestion at peak periods contributed to improvements in both. Although traffic delays had obviously affected tardiness, they had also caused absenteeism. Some employees reported they would rather miss the whole day than be reprimanded for being late to work.[51]

To lessen absenteeism, firms have experimented with reducing the workweek from five days to four days, and some empirical evidence exists in support of the contention that the four-day week leads to greater job satisfaction and reduced short-term absenteeism.[52] To reduce the drain on workers' stamina or to promote improved health, other firms have provided vitamins or special diets for workers, air-conditioning, or medical care and advice.[53]

If the costs of being absent are increased to the worker, then absences should correspondingly be reduced. In order to increase peer pressure for attendance, firms have used group incentive systems of payments, such that an absence can lower the productivity and earnings of the group.[54] Other firms have made it a practice to post attendance (and absence) records in order to increase the self-consciousness of chronic absentees.[55] These policies also tend to reinforce the moral commitment of the employee to the work ethic. Firms have a variety of ways to impose monetary costs on workers who are absent. Labor agreements restrict eligibility for overtime or for holiday pay if workers do not work a full workweek.[56] Many companies have found that workers tend to utilize their annual sick leave to full capacity, often feigning illness. To discourage this, some firms pay workers for unused sick leave; others permit sick leave to accumulate from one year to the next. Various reward systems have been used to stimulate attendance, and eligibility to participate in the reward benefits depends upon a perfect attendance record over some base period. Such systems include lotteries with cash awards, cash bonuses, and time off bonuses. That such rewards do reduce absences has been documented.[57]

Perhaps the most effective way to impose costs upon workers for being absent is through the progressive imposition of sanctions. Most authorities agree that steps in the disciplinary procedure should include initially (1) verbal warnings, then (2) up to two written warnings, followed by (3) one or more suspensions of increasing duration, and eventually, if absences are not reduced, (4) discharge.[58] With each step, the costs of subsequent absences to the worker increase. Most authorities also agree that the supervisor is the appropriate member of management to institute disciplinary action.[59] To be effective, sanctions should be consistently applied and must be communicated to the work force, if employees are to estimate accurately the costs of absenteeism.

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[1]Harvey H. Shore, "Absenteeism, Part 1: How to Analyze Causes and Effects," *Supervisory Management* 20, no. 9 (September 1975):10.

[2]Frederick J. Gaudet, *Solving the Problems of Employee Absence*, Research Study No. 57 (New York: American Management Association, 1963), pp. 60-61.

[3]Janice Neipert Hedges, "Absence from Work: Measuring the Hours Lost," *Monthly Labor Review* 100, no. 10 (October 1977):20.

[4]The Bureau of Labor Statistics classifies the sources of absences as (1) illness and injury, and (2) personal or civic. The latter includes absences associated with family problems, child care, automobile breakdown, jury duty, school functions, etc. Ibid., pp. 16-18.

[5]*Employee Absenteeism and Turnover*, Personnel Policies Forum Survey No. 106 (Washington, D.C.: The Bureau of National Affairs, 1974), pp. 1-3.

[6]Daniel E. Taylor, "Absences from Work among Full-Time Employees," *Monthly Labor Review* 104, no. 3 (March 1981):69-70.

[7]Bernhard Teriet, "Flexiyear Schedules: Only a Matter of Time?" *Monthly Labor Review* 100, no. 12 (December 1977):62.

[8]Daniel E. Taylor, "Absent Workers and Lost Work Hours, May 1978," *Monthly Labor Review* 102, no. 8 (August 1979):49.

[9]Stanley F. Yolles, Pasquale A. Carone, and Leonard W. Krinsky, *Absenteeism in Industry* (Springfield, Ill.: Charles C. Thomas, 1975), pp. 14, 85, 101, and 122-23.

[10]Taylor, "Absent Workers," pp. 51, 52.

[11]Yolles, Carone, and Krinsky. Kathleen R. Garrison and Paul M. Muchinsky ["Evaluating the Concept of Absentee-Proneness with Two Measures of Absence," *Personnel Psychology* 30, no. 3 (Autumn 1977):389-92] have found some evidence of absence-proneness, but interestingly only for such short-term intervals of one month or one quarter.

[12]Elton Mayo and George F. Lombard, *Teamwork and Labor Turnover in the Aircraft Industry of Southern California*, Harvard University Bureau of Business Research Publication No. 32 (Boston: Harvard University, 1944), p. 8.

[13]Floyd Mann and Howard Baumgartel, *Absences—and Employees Attitudes in an Electric Power Company*, Series 1, Report 2 (Ann Arbor: University of Michigan Survey Research Center, 1952), pp. 12-15; and Elton Mayo, *The Social Problems of an Industrial Civilization* (Andover, Mass.: The Andover Press, 1945), pp. 87-112.

[14]Michael R. Carrell and John E. Dittrich, "Employee Perceptions of Fair Treatment," *Personnel Journal* 55, no. 10 (October 1976):524.

[15]Mary Green Minor, "Job Absence and Turnover: A New Source of Data," *Monthly Labor Review* 100, no. 10 (October 1977):28.

[16]Kenneth A. Kovach, *Organization Size, Job Satisfaction, Absenteeism and Turnover* (Washington, D.C.: University Press of America, 1977), pp. 88-89.

[17]David Mark Maklan, "How Blue-Collar Workers on 4-Day Workweeks Use Their Time," *Monthly Labor Review* 100, no. 8 (August 1977):19.

[18]Alton W. Baker, *Absenteeism: Methods for Control of Absenteeism Clauses in Ohio Collective-Bargaining Contracts* (Columbus: Bureau of Business Research, Ohio State University, 1950), pp. 4-5; and Gaudet, pp. 8-9.

[19]Janice Neipert Hedges, "How Many Days Make a Workweek?" *Monthly Labor Review* 98, no. 4 (April 1975):32-33.

[20]Gaudet, pp. 63-75; and Taylor, "Absent Workers," p. 52.

[21]Minor, pp. 28-29.

[22]Compare Baker, p. 11, and Hedges, "Absence from Work," p. 18.

[23]Yolles, Carone, and Krinsky, pp. 22-24.

[24]Bevars D. Mabry, *Economics of Manpower and the Labor Market* (New York: Intext Press, Inc., 1973), pp. 195-255.

[25]Successful control requires an accurate and timely reporting mechanism for attendance. Because chronic absentees have become adept at explaining their absences, without adequate records to identify them the supervisor will continue to approve their absence requests. In recent years, computer programs for attendance have quickly and inexpensively provided information on the use of sick and personal leave; patterns of absences at such times as Mondays, Fridays, holidays, and paydays; causes of absences; and chronic offenders. See Stanley Ratner and Louis Leonardo, "HRA On-Line Time and Attendance System," *Personnel Journal* 54, no. 8 (August 1975):455; and John Scherba and Lyle Smith, "Computerization of Absentee Control Programs," *Personnel Journal* 52, no. 5 (May 1973):367-72.

[26]Fred Luthans and Mark Martinko, "An Organizational Behavior Modification Analysis of Absenteeism," *Human Resource Management* 15, no. 3 (Fall 1976):12.

[27]John F. Robinson, "Why They're Absent—And What to Do about It," *Supervisory Management* 19, no. 6 (June 1974):26-28.

[28]Doris M. Thompson, *Controls for Absenteeism*, Study in Personnel Policy No. 126 (New York: National Industrial Conference Board, 1952), pp. 10-14.

[29]Armando Suarez, "Flexible Working Hours," unpublished MBA report, no. 106 (Bowling Green, Ohio: Bowling Green State University, March 1974), p. 5. Originally called *gleitzeit*, or "gliding" time, flexitime involves dividing the

(Continued on page 22)

MONITORING INTERNAL SUPPORT OF STRATEGIES

*Harold W. Fox**

Objectives must degenerate into work.
—**Peter Drucker**

During the past decade, strategic planning has become both feasible and fashionable. Its efficacy has burgeoned through new concepts and technologies such as strategic business units, portfolio approaches, and generic strategies. The planning process is well known, widely practiced, and publicized extensively.[1] Yet "many managers are concerned that despite elaborate strategic planning systems, costly staffs for this purpose, and major commitments of their own time, their most elaborate strategies never get implemented."[2]

Long-term planning is much more difficult to enforce than budgetary control. Among the various reasons, attainment of goals seems less urgent and deviations from the plans are less obvious. This is probably because budgetary planning is concrete; long-range plans are often abstract.

Nevertheless, heads of companies must develop monitoring devices. But how can they monitor actual progression toward fulfillment of adopted strategies? Exploration of this question is of crucial import if, as a recent article in *Fortune* revealed, perhaps some 90 percent of carefully planned strategies do not work.[3] Yet in contrast to the abundance of writings on strategic planning, the literature of strategic control is sparse.

Most writings on this subject confine themselves to descriptions of elaborate reporting systems. Many firms, however, consider formal statements by themselves inadequate. This article examines some of the limitations of formal reporting systems and discusses surveillance techniques used by firms to supplement standard reports. The discussion is based on a survey of publications on long-range planning and control and on a series of private interviews and group sessions with registrants at seminars or chief executives, managers of all ranks interviewed on consulting assignments, and local business leaders who attended a conference on this subject. Contributors include personnel from large and small companies in many different industries.

Limitations of Formal Reports

We need a greater awareness of the human and economic penalties of short-term management of long-range problems.
—Ruben F. Mettler,
Chairman and CEO, TRW, Inc.

Formal statements can be useful, but they are not sufficient for tracking strategic moves. Perceptive decision makers complain that reporting systems have many limitations. They are apt to be more serviceable for tracing routine operations than strategic progress. Moreover, perspectives differ between lower and senior managers. Also, the communication process itself poses obstacles to the transfer of information.

Reporting is more useful when it concerns repetitive activities rather than long-range plans. Standard printouts omit technological, regulatory, and other external evolutions whose eventual impact on the company's strategy is not obvious. Special tidings contain isolated bits and pieces, resulting in informational gaps and overlaps. Hence, astute policymakers use additional means to ascertain the status of their long-range situation.

A second major problem stems from incongruities in perspectives. Relative to company plans, lower and senior managers have different value systems, different interests, and different "facts." At many companies, reward structure and peer pressure motivate subordinate managers toward short-term achievements and departmental loyalty instead of toward long-range corporate development. Functional, professional, societal, or personal interest tends to supplant a companywide, long-term focus. Surprisingly often, managers of *every* rank are oblivious to a disparity in viewpoints.

Relative to the communication process, a major finding of the research for this article is that misperceptions about subordinates are pervasive. Most executives fault their superiors but not themselves for deficient orientation. "Problems of communication derive from the person to whom I report; I make extra sure that my subordinates understand fully our policies and their roles," typifies opinions from president to supervisor in many companies. Evidently, managers should be more sensitive to a downward communication gap.

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In private interviews and group sessions, policymakers disclosed a large number of monitoring methods; however, no universals emerged. Techniques that proved effective in one atmosphere could be unproductive or even counterproductive elsewhere. For example, autocratic methods

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often are effective to surmount a widely recognized crisis. But they would trigger resistance or revolt at other times or from a less docile middle-management group. Hence uncritical transfer of successful methods from one company to another is not practical. Methods mentioned here must still meet the test of local appropriateness. Categorized for ease of reading, methods in current use seek to overcome difficulties due to (1) report inadequacies, (2) discrepant perspectives, and (3) poor oral communication.

Strengthening Formal Reports

We suffer from data overload and information scarcity.

—A company president

Two interrelated limitations of formal reports on strategy execution are irrelevant coverage and questionable accuracy. Instead of a history of corporate transactions and events, strategists want future-oriented information that relates external developments to corporate situations and initiatives. Accordingly, at some companies periodic newsletters focus on results from environmental scanning that may bear on their strategy. Sensitivity analysis and simulation pinpoint contingent vulnerabilities and estimate the likely size of each threat or opportunity. These news briefs also compare what major strategic elements remain to be completed with the long-range timetable. A few companies have incorporated strategy progress dates into their management information system. But many neglect quantitative targets in favor of broad goals such as balanced diversification, market leadership, or technological advancement.

Comprehensive reporting often is quite voluminous; demand for reducing the burdens of preparation and usage is near-universal. One approach is to formulate, by senior executives and staff specialists jointly, a checklist of critical factors. This list restricts the contents to relevant matters.

Curtailment of internal reporting frees cautious users to elicit overlapping data from diverse independent sources. Such redundancy furnishes input from separate vantage points. It may also expose a prospective threat or opportunity that executives and staff failed to discern.

Overlapping inputs also can bring report inaccuracies to light. Indeed, concern about integrity in reports is not unusual. Realizing that formal statements are "laundered" at lower levels, top management distrusts the contents. Some presidents arrange for independent authentication, perhaps through their personal aides.

In many companies the president, personally, does the verifying. The medium is a formal management review where the president assembles all executives responsible for implementing strategy and questions them closely. The long-range plan and strategy reports are the points of departure. This session, dubbed "the inquisition" by vice presidents and division managers, starts with a cross-examination by the president. A general discussion about strategic developments and desirable modifications follows.

Thus, top management can monitor strategic progress through forward-looking reports, ad hoc checklists, deliberate redundancies, and personal confrontations. A frequently lauded substitute or supplement is annual reexamination of all key assumptions and trends. Meeting in an uninhibited atmosphere, personnel can reveal whether the original assumptions are still valid and what strategic decisions require reformulation. This unrestrained exchange of views exposes possible threats to fulfillment of objectives due to new philosophical divergences. Even if the objectives originally engendered universal enthusiasm, conflicts are apt to emerge as time passes. One reason for this divergence is that individuals have different value systems and interests.

Unifying Disparate Perspectives

Strategic planning is preeminently a social process.

—Quincy Hunsicker,
McKinsey & Company

Special efforts to reconcile conflicting views are manifest at every stage of long-range planning. Techniques vary. At some companies, building a broad base of support is an intrinsic part of the strategy-formulation process. Participative styles provide for diverse inputs right from the start. Elsewhere, departmental reviews of selected alternatives elicit preferences in the middle of the process. Other companies attempt to reflect separate perspectives and interests when the final decisions are made. In resource allocation, for example, perceptions of equitableness (and of local power) temper the avowed criteria of profitability. Strategists also heed the value systems of key customers and other external publics whose reactions will affect the company's fortunes.

After adoption of a long-range plan, a wholehearted endorsement from the board of directors puts top-level commitment on record. The point of departure for management's drive to focus its cadre's interests is clear explication of strategic direction and of desired emphases. Everybody knows what is expected and how he/she will be evaluated. But, since actions speak louder than words, effective managers lead by example.

A case in point is consistent support of product development. Operationally, managers continue to fund product research and development during a cyclical setback, even as more expedient projects languish for lack of support. Also, seed money to explore and test strategic options remains available. In other words, the company does not sacrifice sound programs to meet short-term fiscal goals. Motivationally, managers align incentives with intended strategic accomplishments. They demarcate strategic milestones and define the corresponding evaluation criteria.

Spacing these milestones logarithmically, policymakers schedule and assure prompt completion of highly visible installments. These early successes counteract skepticism. Motivational momentum mounts. Such a progression helps avoid unexpected drastic changes. And management

can, if desirable, insulate some parts of the business from the strategy's ramifications.

Management tries as much as possible to work through the established organization, procedures, and so forth. Upheavals are avoided. The top echelon makes sure all plans dovetail; operating executives attend to coordination. When new personnel are needed, management appoints executives whose philosophy is compatible with the corporate strategy and ethics. Personal integrity is, after all, the key to truthful reporting, faithfulness to commitments, and candor in face-to-face discussions. As always, top management's actions set the tone.

Ideally, some presidents say, key executives' careers are tied to the company's strategy. Top managers who chart the course of future advancements usually keep these tentative career decisions secret. Even the persons selected do not know their prospects. Hence, all executives compete for higher slots by espousing the official plan.

Having reconciled disparate interests at the outset, management still faces the challenges of maintaining compliance over the years. In time, individual interests change. So do external conditions. Early successes give way to some disappointments, reappraisals, and modifications. The course of strategic implementation is always in flux. Hence, strategists should question key insiders and outsiders about the latest developments.

Many take pains to do so unobstrusively. Some companies' top brass observe fulfillment attitudes and efforts during surprise visits to divisions. Usually, an ostensible routine purpose masks the true objective. A variant of this device is the use of surrogates. The director of personnel, the controller, consultants, or others gather information discreetly and report to administrators in confidence.

Such a surreptitious approach is unpalatable to some. Instead, these companies have an explicit policy of bypassing channels on strategic matters. Therefore, direct dealings between senior managers and the lower echelon should evoke no surprise or apprehension. Shrewd managers make sure, however, to favor substantive contributors over the perhaps more articulate politicians. Also, they cultivate multiple sources and check out any inconsistencies.

Promoting Communication

Administrators broaden support for a long-range plan by internal publicity and by active listening in an open-minded atmosphere. They build direct channels to the lower ranks. Using question-and-answer sessions and informal discussions, administrators explain the corporate strategy, how it affects the personnel, and the employees' stake in its success. Videotapes of these sessions are shown at remote branches. Internal telephone "hot lines," designed open-door hours, letters, house organs, and management initiatives keep communication between the top and lower echelons active.

At a paper mill, for example, the decision makers pose key questions to start an exchange of views and help keep the discussion going. The chief executive of another company holds roundtable sessions. He hoists a green flag on a miniature flagpole to signal a period of uninhibited discussion. The basic premise is to move the workforce from information to understanding to support.

Programs for members of middle management include periodic meetings away from the corporate place of work. Participants engage in freewheeling strategy reviews. A few companies use consultants as interviewers. Some encourage directors to raise questions and require personnel to prepare documented answers.[4]

Senior managers demonstrate their receptivity to critical comments by rewarding the challengers and reprimanding the Pollyannas. Bearers of unfavorable news are absolved from blame. The focus is on a mutual effort to expose the pertinent facts and suggest improvements. Through constructive intensive probing ("How can I help you?"), senior executives find out what hindrances may jeapardize the strategic thrust. Several companies require managers to assume a devil's advocate position. Then the simulated objections and deficiencies form an agenda for finding better ways.

Action is the key to credibility, managers say. Unless a good portion of the talk is translated into visible results, informants lose faith and participation wanes. Yet shrewd managers avoid precipitate reactions. Investigation precedes decisions. Formulation and execution of decisions remain the province of normal channels. Meantime, management thanks the informants. They are apprised of the status and disposition of their comments.

To extract the real meaning from discussions and memos about policy matters, proper staffing is essential. At every level, an organization needs knowledgeable and vigilant managers who can accurately evaluate reports and developments. Executives must keep abreast of changes in their subordinates' personality and work. The erstwhile tiger may now be covertly overindulging in alcohol or other drugs. The smooth procedures of yesteryear may have been revised several times to accommodate new needs and to capture computerization efficiencies. Managerial familiarity with the people and operations, in turn, augments subordinates' confidence in the execution of strategic plans.

As noted, administrators promote oral communications about strategic progress through various techniques of eliciting comments. They pay attention to pertinent information and follow through with deliberate action. A companywide dialogue about strategic plans—their importance and their execution—is encouraged.

No Panacea

Of course, informational exchanges are no panacea. Barriers to information transfer are an intrinsic part of the communication process.[5] Deeds prevail. Top management cannot afford to let momentary expediencies impair its resolve to carry out plans with a distant payoff. This is one reason why broad understanding and support are vital.

Altogether, many companies monitor strategic execution with a tailor-made system of appropriate formal

reports, harmonizing mechanisms, and informal communications. The ultimate key to successful implementation is effective leadership by the chief executive. And, since any monitoring system can be undermined, the top official must rely on the loyalty and acumen of responsible executives to attain the long-range plans.

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[1]See, for example, Peter Lorange, *Corporate Planning: An Executive Viewpoint* (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1980).

[2]James B. Quinn, *Strategies for Change: Logical Incrementalism* (Homewood, Ill.: Richard D. Irwin, Inc., 1980), p. 145.

[3]Noted in R. H. Waterman, Jr., T. J. Peters, and J. R. Phillips, "Structure Is Not Organization," *Business Horizons*, June 1980, pp. 18-19.

[4]Robert W. Lear, "Company Signals: How to Know What's Really Going On," *Boardroom Reports*, May 18, 1981, p. 10.

[5]B. Berelson and G. A. Steiner, *Human Behavior* (New York: Harcourt, Brace & World, Inc., 1964), pp. 369, 370, and chap. 13.

(Continued from page 18)

workday into two parts: (1) a core time, usually in the middle of the day but always at peak load periods, during which attendance by participants is mandatory and which often makes up 70 percent of the workday; (2) an optional time for the remainder of the work-time schedule. The beginning and ending hours of the workday, known as the bandwidth, normally have a greater range than the typical eight-hour workshift, varying, for example, from 7:30 a.m. to 8:00 p.m. In most flexitime systems, the participant may earn debit or credit hours during the bandwidth, either borrowing or loaning hours from one day to another during the pay, or accounting, period. Two obligations are imposed on the worker: (1) to be present during the core time; (2) to work the mandatory number of hours during the accounting period, be it daily, weekly, or monthly. To be operational, absence policy must be clearly defined. Only authorized absences are permitted during the core period, and unauthorized absences cannot be made up through accumulated credit hours.

[50]John T. Owens, "Flexitime: Some Problems and Solutions," *Industrial and Labor Relations Review* 30, no. 2 (January 1977):153.

[51]Suarez, pp. 31 and 68.

[52]Richard I. Hartman and K. Mark Weaver, "Four Factors Influencing Conversion to a Four Day Work Week" *Human Resource Management* 16, no. 1 (Spring 1977):24-27. See also Irving Bernstein, "Easing the Constraints of Time Oriented Work," *Monthly Labor Review* 100, no. 2 (February 1977):58-60; Janice Neipert Hedges, "A Look at the 4-Day Workweek," *Monthly Labor Review* 94, no. 10 (October 1971):33-37; Hedges, "How Many Days Make a Workweek?" pp. 29-36; and Maklan, pp. 18-26.

THE PROPOSED AUDITOR'S STANDARD REPORT

A Review of CPA Attitudes

*Benny R. Zachry and Clyde L. Posey**

On September 10, 1980, the Auditing Standards Board of the AICPA issued an *Exposure Draft*, "The Auditor's Standard Report," concerning a proposed "Statement of Auditing Standards." The proposed statement was intended to revise the content and wording of the current form of the standard report, which has been in existence since 1948. It did not in any way change the auditor's existing responsibilities in conducting an audit in accordance with generally accepted auditing standards or change the basis for forming an opinion as to whether financial statements are presented in conformity with generally accepted accounting principles.[1]

Although the AICPA Board subsequently rejected the proposed changes, many CPAs believe that a revision of the Auditor's Standard Report is needed. Since the issue is likely to resurface in the future, this article reports the results of a survey of AICPA members to determine their views on the subject.

Brief History

Since 1948, responsibilities of auditors have been greatly expanded and clarified. There has been no corresponding change in the nature of the standard report other than superficial changes in wording mandated by changes in generally accepted accounting principles. For example, in 1963, the term "surplus" was replaced by the term "retained earnings," and in 1971, a reference was added to the Statement of Changes in Financial Position in each paragraph.[2]

Since changes in the standard report have not kept pace with changes in auditor responsibilities, many believe that the current short-form report is no longer an effective means of communication with users. In 1975, AICPA President Wallace E. Olsen said, "Our method of communicating with the users of our reports . . . is seriously deficient."[3]

Prior to this, however, in 1974, the AICPA had formed the Commission on Auditor's Responsibilities (Cohen Commission) and had charged the committee with studying the role and responsibilities of independent auditors.[4] In 1977, the committee issued its conclusions, and one of the recommendations was that the Auditor's Standard Report should be revised to provide better communication with users with respect to the nature of an audit and the financial statements reported therein.[5]

Thus, the stage was set. The issuance of the *Exposure Draft* in September 1980 represented a culmination of work completed by a task force of the Auditing Standards Board which had been formed to study the Cohen Commission's recommendations to revise the report. Basically, the *Exposure Draft* proposed changes in seven distinct areas of the standard report. Each change was designed to give users of the report a "clearer indication of the character of the audit and the degree of responsibility the auditor is taking by having the report state certain concepts that currently exist in authoritative literature but are only implied in the current form of the report."[6]

In other words, the proposed changes were designed to improve communication between the auditor and the user.

Research studies have indicated that many users do not understand the current form of the report. For example, Epstein reported that 21.5 percent of corporate shareholders found the standard report difficult to understand.[7] A study completed by Fess and Ziegler reported that only one-third of individual shareholders completely understood the report, while less than half of all bankers and financial analysts surveyed understood the report completely.[8]

The Auditing Standards Board intended the proposed statement to be a more effective communicative device and thus more understandable to users. This article reports the results of a survey made of AICPA members to gauge their views on whether the proposed revisions would achieve more effective communication.

Scope of the Study

A pre-tested questionnaire was mailed to a national sample of 50 sole practitioners, partners, and shareholders in professional accounting corporations randomly selected from the most recently available membership list of the AICPA. Of the 50 mailed, 24 completed questionnaires were returned, for a response rate of 48 percent.

Each CPA surveyed was presented with a series of nine statements dealing with the subject material and was asked to respond to each statement based on his/her level of agreement, disagreement, or indifference to the statement.

Results

The results of the survey are shown in Table 1. The first statement asked the respondent's opinion on whether or

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Table 1

CPA ATTITUDES TOWARD PROPOSED CHANGES IN THE AUDITOR'S STANDARD REPORT

Questionnaire Statement	CPA Responses, in Percentages					
	Strongly Agree	Agree	Indifferent	Disagree	Strongly Disagree	No Opinion
1. Users of financial statements do not understand the current form of the Auditor's Standard Report.	4	50	8	38	0	0
2. Many users misunderstand the auditor's role and responsibility with respect to the Auditor's Standard Report.	21	50	4	25	0	0
3. Including the word "independent" in the title of the report will distinguish the report in the minds of users from reports of the entity's management or internal auditors.	8	54	13	21	0	4
4. An assertion that the financial statements are management's representations will give the user clearer notice of the nature of the relationship between management and the independent auditor.	13	58	8	21	0	0
5. The audit report should inform users that an audit is "intended to provide reasonable, but not absolute, assurance as to whether financial statements taken as a whole are free of material misstatements."	17	71	0	12	0	0
6. The term "audited" is a more descriptive term of the audit process, in the minds of users, than the term "examined."	8	54	17	17	4	0
7. Elaborations on auditor judgments will not be perceived by users as an improvement upon "as we considered necessary in the circumstances."	0	63	29	8	0	0
8. Deletion of the term "fairly" from the phrase "present fairly . . . in conformity with generally accepted accounting principles" will not change the user's perception of the auditor's responsibilities or the level of assurance intended by the opinion.	8	42	17	29	4	0
9. Removal of the consistency reference will not change the auditor's existing responsibility to evaluate changes in the accounting principles, in the minds of users.	13	46	4	37	0	0

not users understand the current form of the Auditor's Standard Report. The responses support other research projects done in the area. Over half of the respondents agree or strongly agree that users do not understand the current form of the report.

The second statement dealt with whether users understand the auditor's role and responsibility. As shown in the table, 71 percent of the respondents felt that users misunderstand these roles and responsibilities.

The remaining statements dealt with the seven proposed changes to the standard report and were presented in the same order in which they were addressed in the *Exposure Draft*.

The first proposed change required that the word "independent" be included in the title of the report. Since the quality of independence is a fundamental audit characteristic, the members of the Auditing Standards Board felt that this quality should be explicitly expressed in the report to distinguish the Auditor's Standard Report from reports of management or internal auditors. Since the objective of the revised statement is better communication with users, will this change aid the user in better understanding the report?

As shown for statement 3 in the table, 62 percent of the respondents agreed that inclusion of the term "independent" would serve to make the appropriate distinction in the minds of users. An additional 34 percent either disagreed or were indifferent on the matter.

The second proposed change dealt with providing an assertion in the report that financial statements are management's representations. This has long been regarded as an established fact by such pronouncements as *Statement on Auditing Procedure No. 1*, issued in 1939, *Securities and Exchange Commission ASR No. 62*, issued in 1947, as well as *APB Statement No. 4*, issued in 1972. Therefore, members of the Auditing Standards Board decided that such a statement would give the user clearer notice of the nature of the relationship between management and the independent auditor. Responses to statement 4 in the table show that 71 percent of the respondents were at some level of agreement with this.

There has been evidence that some users do not understand the level of assurance provided by an audit. The Auditing Standards Board concluded that, as a third change, the report should inform users that the audit provides "reasonable, but not absolute, assurance as to whether financial statements taken as a whole are free of material misstatements." As shown by responses to statement 5 in the table, a full 88 percent of the respondents agreed with this proposed change.

The fourth proposed change replaced the word "examined" with the word "audited" in the standard report. The Board considered "audited" to be more descriptive of the audit process and not as apt to be misunderstood by users as the term "examined." As shown in the table, 62 percent of the respondents agreed with statement 6, 21 percent disagreed, and 17 percent were indifferent on the subject.

The fifth proposed change expanded the scope paragraph to include a more detailed description of the character of the audit in place of simply stating that procedures were performed "as we considered necessary in the circumstances." As shown in the table, 63 percent of the respondents felt that such elaborations on auditor

judgments would *not* be perceived by users as an improvement. Only 8 percent indicated a belief that users would perceive the change as an improvement. A substantial number (29 percent) were indifferent on the subject.

As a sixth change in the audit report, the Board proposed the removal of the word "fairly" from the phrase "present fairly . . . in conformity with generally accepted accounting principles." The Auditing Standards Board considered the word "fairly" to be subjective in nature and, therefore, liable to different interpretations by different users of the report. Also, since the concept of fairness is embodied in the adherence to generally accepted accounting principles, the use of the word was considered to be unnecessary. Half of the respondents felt that deletion of the term "fairly" would *not* change user perception of the auditor's responsibilities or the level of assurance intended by the opinion. One-third believed that the term's removal would change user perceptions, while 17 percent were indifferent on the matter.

The final change proposed by the Auditing Standards Board was the deletion of the consistency reference with respect to application of generally accepted accounting principles. Since GAAP already provides guidelines for maintaining, accounting, and disclosure of changes in accounting principles, the Board maintained that it is redundant to mention that financial statements are *both* consistent and in accordance with GAAP. The question, then, is: Would users interpret this as a change in the auditor's responsibility to evaluate changes in accounting principles? As indicated by responses to statement 9 in the table, 59 percent of the respondents felt that removal of the consistency reference would *not* change user perception of the auditor's existing responsibilities; 37 percent thought the deletion *would* change user perceptions of the auditor's responsibility. Only 4 percent were indifferent on the matter.

Interpretation and Analysis

What can be inferred from the above data? First, to summarize the findings in a more compact format:

1. Users frequently misunderstand the current form of the Auditor's Standard Report.
2. Users may misunderstand the auditor's role and responsibility with respect to the Auditor's Standard Report.
3. Users will be able to distinguish the report from reports prepared by management if the word "independent" is included in the title of the report.
4. Users will be more likely to understand the auditor-management relationship if, in the body of the report, it is stated that financial statements are management's representations.
5. Users should be informed about the level of assurance provided by an audit.
6. Users will perceive "audited" as a more descriptive term of the audit process than the term "examined."
7. Users will not perceive elaborations on auditor judgments as an improvement upon "as we considered necessary in the circumstances."
8. Deletion of the term "fairly" will not change the user's perception of the auditor's responsibility or the level of assurance intended by the opinion.
9. Removal of the consistency reference will not change the user's perception of the auditor's responsibility to evaluate changes in the accounting principles.

With respect to the seven proposed changes in the Auditor's Standard Report, only the fifth change was not expected to be viewed as an improvement by or for users. This change dealt with making elaborations on auditor judgments in the report, other than simply stating that procedures were performed "as we considered necessary in the circumstances." The remaining six changes were all considered by CPAs to be an improvement over current reporting practices, or at least were expected to be perceived by users as improvements.

Therefore, it can generally be said that the proposed changes would make for a more communicative Auditor's Standard Report than the report now in use. The proposed report either adds information to aid the user in understanding the role and responsibility of the independent auditor or deletes information which is not expected to affect the user's understanding of the auditor's role and responsibility. Note that nothing has been said about the impact the proposed report would have on the user's understanding of the report itself.

Along with the returned questionnaires came several interesting comments from around the nation. Most are quite negative with respect to the impact that the proposed report will have on user understanding of the report itself. As one CPA put it:

> The proposed report language is a step backward—it is overly defensive and tends to degrade the importance and effectiveness of an audit examination.

Another wrote:

> Making it [our audit] clear to all users is probably never going to be accomplished.

One CPA summed up the entire situation:

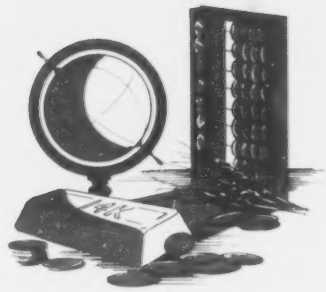
> Until the AICPA "guts-up" and explains GAAP and the SEC quits trying to [explain GAAP], under the auspices of protecting every fool on the street, all of the above is so much token effort. Unfortunately, this probably won't happen very many days before government bureaucracy disappears.

Conclusion

The findings described in this article indicate that the proposed form of the Auditor's Standard Report would be a more effective means of communication with users. However, although in many respects it would help the user to better understand some of the auditor's responsibilities with respect to the audit, there is little evidence to support the contention that, because of this, users would better understand the proposed new form of the audit report itself. This seems to be due, in part, to the fact that

(Continued on page 27)

TAX CORNER



by Wm. Brent Carper, Ph.D, C.P.A.

INTRAFAMILY INTEREST-FREE LOANS

Much confusion seems to continue to reign among many taxpayers regarding the use of intrafamily interest-free loans. Even some accountants and attorneys seem to regard the loans as some type of shady tax dodge that will get their clients in trouble with the IRS. This brief article attempts to explain that such is not the case.

The Setting

The essence of the interest-free loan is that less income has the same effect on your income taxes as does an extra deduction. For instance, assume that your income is $60,000 and that you have deductions and exemptions worth $15,000, resulting in $45,000 of taxable income. On a joint return for 1982, that would result in a federal income tax of approximately $11,145.

If you could increase your deductions by $10,000, taxable income would drop to $35,000 and the federal income tax liability would decrease to $7,257. That represents a tax savings of $3,888. Thus, less may equal more. The less income you generate, the more tax dollars you save!

The Mechanics

Let's say that a couple has two children. Both are in junior high school and will probably attend college. Further, the parents intend to finance the children's college educations, and possibly even assist them with the purchase of their first cars and homes. The decision then becomes one of whether or not the couple pays for their children's educations and so on with gross or net tax dollars. So why not do it with gross or before-tax dollars using an interest-free loan? Here's how.

Assume that our couple, "Mr. and Mrs. Johnson," has $50,000 in a money market fund yielding 16 percent interest, or $8,000 per year. Further, the Johnsons are in the 50-percent tax bracket. That means that the government is going to get $4,000 of the interest income and leave $4,000 for the Johnsons to give their children for college.

As an alternative, the parents can lend the $50,000 to the children interest free and let the children invest in the same money market fund and earn the same $8,000 themselves. Assuming that the children have no other income, the children will have to pay about $832 in federal income taxes whereas Mom and Dad had to pay $4,000.

The children are provided with an additional $7,168 in disposable funds—almost twice as much as they would have received had the parents supported them from net tax dollars. In ten years, the children will have accumulated $71, 680 ($35,840 each) after taxes (ignoring compound interest) for their college educations, homes or whatever. At the same time, the actual cost to the parents is $40,000 (the after-tax income given up). The government has made up the rest in the form of lower taxes.

Avoid Pitfalls

In the intrafamily setting it is important to distinguish the interest-free term loan from the interest-free demand loan. With a term loan, the borrower, in this case the children, receives the right to use the money loaned for a given period of time. With a demand loan, the borrower simply is permitted to use the funds as long as the lender wishes. The economic difference between the two types of loans has led to divergent tax consequences.

Specifically, the IRS primarily has concentrated on the gift tax aspects of interest-free loans. The government has attempted to maintain that the right to the use of money loaned by one related party to another constitutes a gift and therefore triggers gift tax to the donor. Further, the IRS has maintained in various Revenue Rules that with regard to a term loan, the lender also is subject to gift tax on any interest foregone. That is, the lender is subject to gift tax on any interest that could have been earned during any quarter of the year had the note been of an interest-bearing nature.

Fortunately for the taxpayer, the courts have tended to take a more favorable position regarding the donor's position. The courts normally have held that interest-free

loans to family members, *payable on demand*, are not subject to the federal gift tax provisions. At least one court has stated that while policy reasons might dictate a different result and while it is true that the recipients enjoy a direct economic benefit at the expense of the taxpayer, the federal gift tax laws provide no authority for the taxing of interest-free loans [*Crown v. Commissioner*, 67 T.C. 1060, 585 F. 2d 234 7th Cir. (1977)].

Another court has ruled that there is no express or statutory duty on the part of the children to pay interest to their parents, nor are there any legal requirements on the part of the parents to charge their children interest. The court concluded accordingly that there was no gift regarding the interest-free loan in question [*Johnson v. U.S.*, 254 F. Supp. 73 (1966)].

The essence of this discussion seems to be that the value of term loans can be ascertained and therefore under some circumstances may be subject to gift tax. To the contrary, the present value of a demand note is not determinable, since the term of the loan is unknown. Hence, demand loans to related parties have tended to make for very strong shields from attack by the IRS. Additionally, if the value of the free use of the money is less than $10,000 per year beginning in 1982 ($3,000 per year in prior years), the gift-tax issue is not applicable. Also, there is nothing on the individual income tax return (Form 1040) that specifically requires disclosure of making or receiving an interest-free loan. Thus, there is nothing to instigate an audit.

Conclusion

The key to this method of tax avoidance is that taxable income instead of after-tax income is transferred to the recipient, in this case, one's children. Implicit in the whole process is the fact that taxpayers would not transfer the money to their dependents to save taxes unless they were going to give their children the money anyway.

Readers are advised to seek the counsel of their tax advisor to answer detailed questions regarding the topic.

(Continued from page 25)

many users do not understand the underlying purpose and function of the audit process. Certainly there is room for future research in this area.

The results of the survey described above demonstrate that CPAs generally believe that additional explanations would be desirable in the Auditor's Standard Report. Although the project involving changes in the standard report has been dropped by the AICPA, the survey findings suggest that the issue may resurface in the future.

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[1]American Institute of Certified Public Accountants, *SAS Exposure Draft*, "The Auditor's Standard Report" (New York: AICPA, 1980), p. 1.

[2]Dale L. Flesher and Tonya K. Flesher, "The Development of the Auditor's Standard Report in the U.S.," *The Journal of Accountancy*, December 1980, p. 70.

[3]"AICPA News," *The Journal of Accountancy*, September 1975, p. 7.

[4]Commission on Auditor's Responsibilities, *Report of Tentative Conclusions* (New York: AICPA, 1977), p. xi.

[5]Ibid., p. 75. For further information, see Lee J. Seidler, "Major Points in Commission on Auditor's Responsibilities Report," *The CPA Journal*, June 1977, pp. 21-24, and AICPA, "Case History of the Project to Revise the Auditor's Standard Report" (New York: AICPA, 1980), mimeographed.

[6]*SAS Exposure Draft*, p. 1.

[7]*Report of Tentative Conclusions*, p. 156.

[8]Phillip E. Fess and Richard E. Ziegler, "Readership of the Audit Report," *The CPA Journal*, June 1977, p. 6.

U. S. CONSUMER PRICE INDEX - U[1] (UNADJUSTED)
1967 = 100.0

Month	1978 CPI	1979 CPI	Percent Change Month Ago	Percent Change Year Ago	1980 CPI	Percent Change Month Ago	Percent Change Year Ago	1981 CPI	Percent Change Month Ago	Percent Change Year Ago	1982 CPI	Percent Change Month Ago	Percent Change Year Ago
Jan.	187.2	204.7	+ 0.9	+ 9.3	233.2	+ 1.4	+13.9	260.5	+ 0.8	+11.7	282.5	+ 0.4	+ 8.4
Feb.	188.4	207.1	+ 1.2	+ 9.9	236.4	+ 1.4	+14.1	263.2	+ 1.0	+11.3	283.4	+ 0.3	+ 7.7
March	189.8	209.1	+ 1.0	+10.2	239.8	+ 1.4	+14.7	265.1	+ 0.7	+10.6	283.1	- 0.1	+ 6.8
April	191.5	211.5	+ 1.2	+10.7	242.5	+ 1.1	+14.7	266.8	+ 0.6	+10.0	284.3	+ 0.4	+ 6.6
May	193.3	214.1	+ 1.2	+10.8	244.9	+ 1.0	+14.4	269.0	+ 0.8	+ 9.8	287.1	+ 1.0	+ 6.7
June	195.3	216.6	+ 1.2	+10.9	247.6	+ 1.1	+14.3	271.3	+ 0.9	+ 9.6	290.6	+ 1.2	+ 7.1
July	196.7	218.9	+ 1.1	+11.3	247.8	+ 0.1	+13.2	274.4	+ 1.1	+10.7			
Aug.	197.8	221.1	+ 1.0	+11.8	249.4	+ 0.6	+12.8	276.5	+ 0.8	+10.9			
Sept.	199.3	223.4	+ 1.0	+12.1	251.7	+ 0.9	+12.7	279.3	+ 1.0	+11.0			
Oct.	200.9	225.4	+ 0.9	+12.2	253.9	+ 0.9	+12.6	279.9	+ 0.2	+10.2			
Nov.	202.0	227.5	+ 0.9	+12.6	256.2[a]	+ 0.9[a]	+12.6[a]	280.7	+ 0.3	+ 9.6			
Dec.	202.9	229.9	+ 1.1	+13.3	258.4	+ 0.9	+12.4	281.5	+ 0.3	+ 8.9			
Annual Avg.	195.4	217.4[a]			246.8			272.4					
Annual Change	--	11.4%			13.5%			10.4%					

[1]The Consumer Price Index for All Urban Consumers reflects the buying habits of about 80 percent of the non-institutional civilian population of the U.S. and also uses a market basket based on the 1972 and 1973 expenditure survey.

[a]Revised.

Source: U.S. Department of Labor, Bureau of Labor Statistics.

Prepared by: Bureau of Business and Economic Research, Memphis State University.

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